

BUSINESS WEEK

WEEK
AGO

YEAR
AGO



His host, Stalin: U.S. Chamber of Commerce's Eric Johnston will go economic window-shopping in Russia.

START
OF WAR
1939

BUSINESS
WEEK
INDEX

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U N I V OF M I C H
G E N L L B R Y
A N N A R B O R M I C H



Victory isn't enough

THE plain truth for business is that production for war isn't enough—production for peace and peacetime jobs is your responsibility, too.

And it will be a tougher responsibility. In war, any production has been welcome; in peace, only efficient, low-cost production can survive. Today the cost of manufacturing an article in some plants is *several times* what it is in others. It needs no economist to tell what will happen to those high-cost plants and their workmen's jobs when peace returns.

It will be too late, when soldiers are returning, to put yourself in compet-

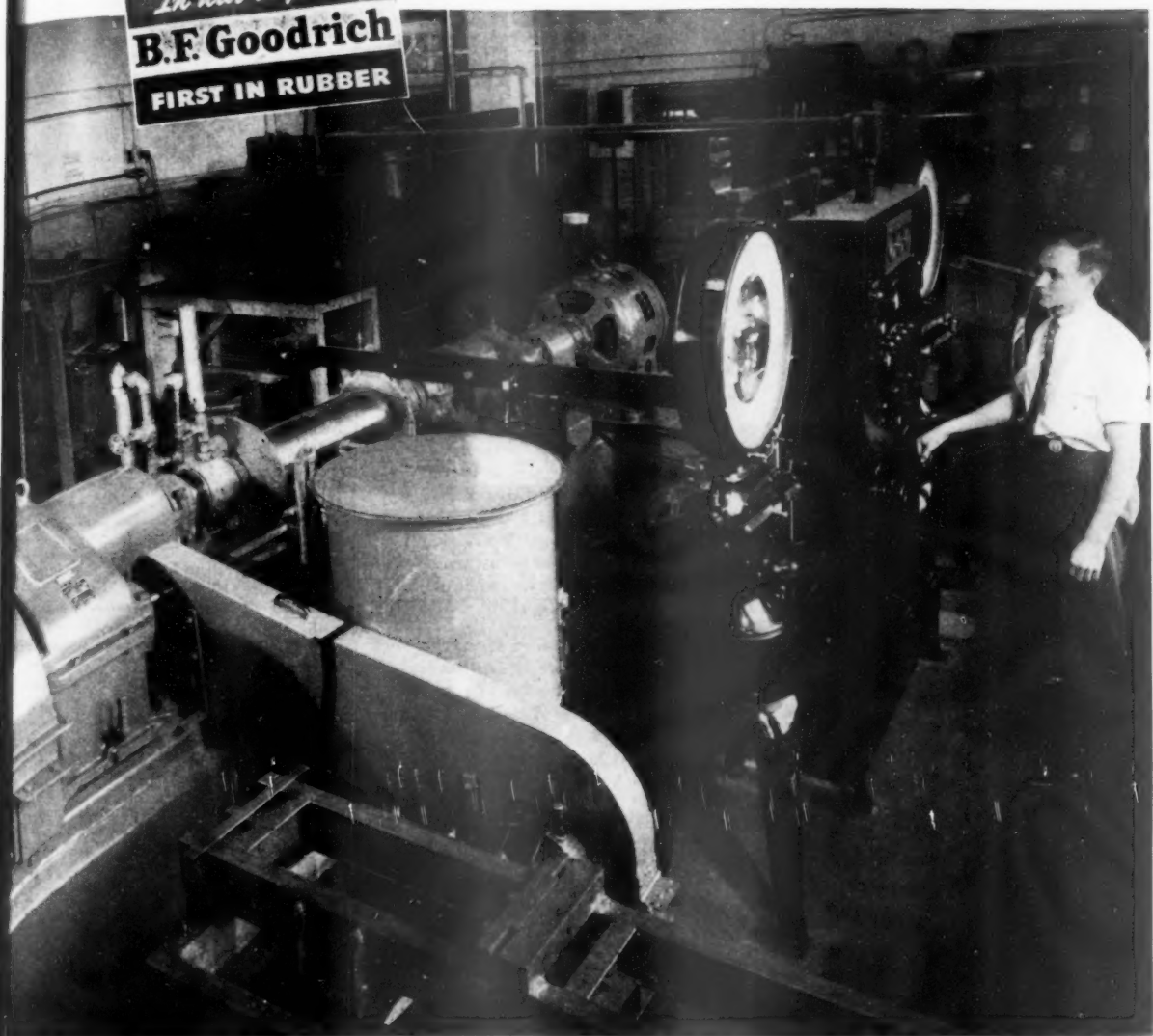
itive position to assure them jobs. Now is the time to do that sort of planning, if for no other reason than to pay your debt to the men who are making an American future possible at all.

You will need modern, efficient machines. Whether you intend to buy them new or used, decide now on the number, size and type—and so be ready the moment they are available. Trained men at Warner & Swasey will work with your production men to lay out that plan—without cost, and regardless of whether or not you include Warner & Swasey Turret Lathes in your program.



YOU CAN TURN IT BETTER, FASTER, FOR LESS . . . WITH A WARNER & SWASEY

In war or peace
B.F. Goodrich
FIRST IN RUBBER



Artificial ocean

A typical example of B. F. Goodrich product improvement

THAT machine can imitate a sandy harbor in the south Pacific or a muddy North American stream. The propeller shaft of a ship is down under the water where it can't be oiled. Water is used for lubrication but in the water are millions of particles of sand and mud. Grinding of these particles used to wear down both bearings and shafts until years ago B. F. Goodrich developed a smooth, slippery soft-rubber bearing that resists wear the same way a tire does.

But when the war brought so many

new kinds of craft — from battleships to mosquito boats — new bearings had to be made and tested. Tests in actual use would take months. Some faster way was badly needed.

So B. F. Goodrich men developed the "artificial ocean" — the device that duplicates conditions of water, weight of shaft, speed and other factors that might be met by bearings in submarines or surface craft in any part of the world. They can test new rubber compounds, new sizes or designs, new solutions for nearly any problem.

Research at B. F. Goodrich is continuous and applies not just to new products but to improvement of old ones. No product is regarded as finished or standardized or too small to bother with. If you're a user of industrial rubber goods, don't decide that any product is the best to be had until you've found out what B. F. Goodrich may have done in recent months to improve it. *The B. F. Goodrich Company, Industrial Products Division, Akron, Ohio.*

B.F. Goodrich
 RUBBER and SYNTHETIC products



CAN ONE
BATTERY
DO THE
WORK OF
TWO
?

What Happened When An Electrician Tried To Find Out

Early in 1941, an industrial plant converted to war production and changed from an 8-hour to a 24-hour day. But when the Edison field engineer recommended spare batteries for the industrial trucks, the plant electrician replied "We don't need spare batteries. We'll find enough time for charging during lunch periods and early morning hours. We know our Edison Batteries can 'take it' even if we overwork them." And in this he persisted in spite of every warning.

Then, two years later, he told the Edison field engineer that the batteries were not holding up. At the field engineer's recommendation tests were conducted, and the batteries delivered 110 per cent of rated capacity. This finally convinced the electrician that, although the batteries were "taking it" as he had insisted they would, there simply was not enough time for charging and he agreed at last that he needed spares to keep his trucks in 24-hour service.

The fact that these batteries did "take it" as the electrician expected is no argument for trying to make one battery do the work of two. It is, however, an impressive demonstration of dependability under intolerable conditions, and it testifies to that reserve of dependability which alkaline batteries have available under all conditions.

Some of the unique characteristics of the Edison Alkaline Battery which account for its extraordinary performance are cited in the columns below.

ADVANTAGES OF THE EDISON ALKALINE BATTERY IN INDUSTRIAL TRUCKS AND TRACTORS

- ★ It is durable mechanically. High strength steel construction is used in the containers, grids, pole pieces, etc. The electrolyte is a preservative of steel.
- ★ It withstands temperature extremes. It is not damaged by freezing. Free air spaces on all sides of all cells provide ventilation for rapid cooling under high temperature conditions.
- ★ It is foolproof electrically. It may be accidentally short-circuited, over-charged, over-discharged, or even charged in the reverse direction without injury.
- ★ It is simple to maintain. Merely charge adequately, add pure water, keep clean and dry.
- ★ It can be charged rapidly. It is not subject to finish-rate limitations. It requires no equalizing.
- ★ Its tray assembly and cell connections are extremely simple.
- ★ Its life is so long that its annual depreciation cost is lower than that of any other type of storage battery.



EDISON STORAGE BATTERY DIVISION,
THOMAS A. EDISON, INCORPORATED, WEST ORANGE, N. J.

Edison
ALKALINE BATTERIES

BUSINESS WEEK

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Price Control—Pro and Con

OPA appears to be doing all right in its fight to get renewal of the price control act through Congress with no strings attached.

For one thing, Congress plainly likes OPA's Chester Bowles.

This new cordiality is welcomed by price officials because it indicates that there won't be a repetition of the legislative witch hunt which characterized last summer's fight over OPA's appropriations act and the Commodity Credit Corp. bill (which was weighted down with riders designed to hamper OPA). But they recognize that these preliminary amenities won't necessarily make the showdown fight any easier.

Two Soft Spots

Biggest threat to continuance of OPA's present price control program is the certain congressional ban on consumer food subsidies. But the Administration thinks it has the strategy for licking the subsidy problem (BW—Mar. 11 '44, p. 5). So OPA is concentrating its worrying on two other threats:

(1) That Congress will write in a provision allowing appeal from OPA rulings in any United States district court, instead of in only the Emergency Court of Appeals (set up for this purpose) as at present;

(2) That the one word "generally" will be dropped from the price act. Present law requires that prices established by OPA be "generally fair and equitable." This apparently innocent change would bring down a hornet's nest of hardship cases, crack the price line right and left.

A combination of these two changes would mean that any business man who didn't get what he considered fair treatment could bring suit against OPA in any federal court in the land.

The Court Helps

The Supreme Court's action this week, in upholding OPA's authority to control prices and rents, would seem to provide support where the agency needs it most—to bulwark its legal activities. Actually, however, the court's action has only negative importance.

An adverse decision at this time could have hurt OPA seriously. A positive one removes any doubts as to the present scope of its authority—but won't keep the legislators from limiting that authority if they want to.



ELLIOTT FOR OCR

Appointment of Dr. William Y. Elliott, chief of WPB's Stockpiling & Transportation Division, as vice-chairman for civilian requirements (BW—Mar. 18 '44, p. 5) now seems certain. Elliott is acceptable to both WPB's chairman, Donald M. Nelson, and its executive vice-chairman, Charles E. Wilson. Formal announcement is being deferred indefinitely, however, because the future of the Office of Civilian Requirements is closely tied to the general reorganization which will gear WPB for reconversion.

Agencies Besieged

The New Deal was cheered this week by the victory scored in Oklahoma's Second Congressional District, but it isn't faring so well in the District of Columbia. There is no assurance that the Administration can stand up against the Senate's attack on White House domination of government agencies. As launched, that attack is three-pronged:

(1) A ban on funds for agencies set up by President Roosevelt's orders which have been in existence more than one year without specific congressional approval;

(2) A requirement that some 27,000 federal employees earning \$4,500 or more yearly be confirmed by the Senate;

(3) A stipulation that the Tennessee Valley Authority turn all its revenue into the U. S. Treasury and live henceforth solely on such direct appropriations as Congress pleases to give it.

Whether the attack will get through to its objective depends largely on the infighting between the conferees representing the Senate and House on the independent offices appropriation bill, into which the Senate wrote the crippling amendments. The Senate is standing pat. The Administration's hope lies in deadlocking the conference committee, thus forcing compromises that both Senate and House will eventually accept.

To Probe Food Distribution

As expected, the Federal Trade Commission's weighty study of food distribution costs and methods (BW—Dec. 4 '43, p. 94) is providing lush fodder for farm bloc congressmen. Using FTC's study as a starting point, the House Agriculture Committee soon will plow into this subject in a formal investigation.

Predominantly antisubsidy, the House committee will use its findings to urge that the consumer's food bill be held down by squeezing the water out of the distribution system rather than by subsidizing increased farm prices. This will inject another argument into the subsidy fight now coming to a boil on Capitol Hill.

More FTC Studies Due

FTC is plugging away at similar surveys of other fields. A study of the clothing and floor coverings industries is nearing completion.

FTC's real bid for attention will come when it completes its study of advertising as an element in distribution costs. Under pressure to deal with information most needed by OPA, WPB, and other war agencies, FTC passed over the subject of advertising lightly in its distribution surveys and has been saving its material for a bang-up report.

Truck Line Rescue

For-hire truckmen have pretty well convinced the Office of Defense Transportation that some of the weaker truck lines can't keep going without financial help from the government.

ODT now is trying to work out a deal with Defense Plant Corp., under which DPC would buy new trucks and lease them, with an option to buy, to hard-pressed truckers. DPC is agreeable to the plan in principle—it already has put up money for truck purchases in a

**MORE THAN
EVER IT WILL
BE AN
AUTOMATIC
WORLD**

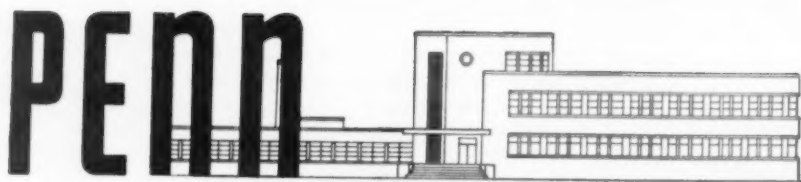
A FINGER PRESSES A BUTTON, or flicks a switch . . . and automatic machinery does the job! There, in a sentence, is a big part of the story of American achievement.

Right now, on the drawing boards of Industry, products and processes are taking shape which will write a new chapter of that story. *Products to set new standards of comfort, convenience and enjoyment in living.* Processes and machines to cut manufacturing costs, and so broaden consumer markets.

To a greater extent than ever before the dreams of inventors, the plans of engineers will be made practical realities by new applications of automatic controls.

Designing and manufacturing automatic controls is our business. Our skill, facilities and experience have been, and are, at the disposal of our fighting forces. Without detriment to this important war work, we are prepared to work with manufacturers who have control problems.

Inquiry involves no obligation. If your present or post-war product requires automatic control we invite you to consult us now. *Penn Electric Switch Co., Gosben, Indiana.*



AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSORS

new special cases—but details are not settled yet.

Truckmen don't turn up their noses at equipment financing, but they object that the plan as it stands would have only an indirect effect on operating expenses, which is where they feel the worst squeeze.

OPA Greases Ration Wheels

Removal of expiration dates on red and blue ration stamps (meats, fats, and processed foods) was forced by the housewives' rush to cash them in for tokens, which are permanently valid. But the change probably would have been made eventually. Indefinite validation has worked with shoe stamps by helping to prevent buying rushes. It's also used for sugar stamps.

Note to consumers: Continue to use up your red and blue stamps in the

order in which they are validated, since eventually they may be canceled (as with shoe stamp 18 which dies the end of this month).

OPA says that, except for scattered hoarding of tokens (which should stop now), the disks are going over big with both the public and retailers. Complaints that tokens would cause trouble in coin machines have died down.

Surpluses for Retailers

Small business spokesmen are pushing an idea for selling government-owned surpluses by sending them out to retailers on consignment. But, while the plan may stir up a lot of talk, the odds are that it never will become official policy.

Retailers themselves are divided, the small ones favoring consignment sales,

the large establishments figuring that cash-on-the-barrelhead selling would give them more competitive advantage.

Government officials are wary of spreading goods around the country without knowing how fast they will move or what arrangements dealers can make for storing them.

Labor Battalions Doubtful

It's no coincidence that half a dozen government officials and several congressmen have started talking simultaneously about drafting men rejected by the Army into labor battalions. A 4-F labor draft (page 17) might provide a convenient compromise between the Administration, which has been plugging for a national service act, and Congress, which plainly won't agree to sweeping manpower controls.

The Army would like to pull in the

Out on a Limb

Periodically, Business Week's Washington Bureau has offered, under the above title, its judgment on numerous issues which, in the nature of things, are uncertain.

Calling the Score

On the predictions made when the score was last called (BW-Oct. 23'43,p7), we can now take a bow on the following:

There will be no horizontal increase in the price of crude oil.

Freight rate increases granted by the Interstate Commerce Commission in early 1942 but suspended last May until Dec. 31 will be further suspended, perhaps canceled altogether.

OPA will find a way to control the price of beef on the hoof without actually imposing price ceilings on live cattle.

When all is said and done, the yield from the new tax will not go much over \$5,000,000,000.

The controversy raging over the 1944 food program will end up in an extension of the Commodity Credit Corp.'s life, tied to permission to continue all present subsidies, plus funds for moderate extension of subsidies to hold bread and dairy products prices where they are.

A prediction likely to prove sour is that federal license and tax penalties on oleomargarine will be toned down, possibly removed entirely. On another—that John L. Lewis and the coal miners will be sitting in the 1944

A.F.L. convention—we have still got to mark time.

New Predictions

As new predictions, in the short-term category, the following are offered as better-than-even bets:

The Emergency Price Control Act, which expires June 30, will be extended for a least six months, with no ban on consumer food subsidies.

The Little Steel formula will remain the basis for the Administration's wage stabilization policy at least until after the elections.

Contract termination will be left in the hands of the procurement agencies, subject to postsettlement audit for fraud by the Comptroller General.

Congress will not prohibit cost-plus-fixed fee contracts.

The tax simplification bill will be passed by Congress substantially as it has been drawn up by the House Ways and Means Committee.

Cradle-to-grave social security legislation will not be enacted before the elections.

Legislation giving insurance companies specific exemption from federal regulation and the antitrust statutes will not become law.

No price ceilings will be put on used cars.

War production program this year, already cut to a schedule of \$70,000,000, will fall even below that figure.

New ship tonnage this year will be less than last.

Congress will not force a reorganization of the Federal Communications Commission this year (but it will be one of the first jobs that the new Congress undertakes in 1945, Roosevelt or no Roosevelt).

A few refrigerators, washing machines, vacuum cleaners, and the like may be produced this year, but none will reach consumers until 1945.

A limited number of automobiles will be made to meet war workers' needs before the industry as a whole is reconverted.

Rationing will be continued through this year on goods to which it now applies. No major items will be added. This goes for clothing, in general. A few individual lines, such as work clothing, may be rationed.

Long-Term Prospects

For the long pull, consider these:

A national service law never will be enacted by Congress.

Postwar compulsory military training may be voted by Congress but won't last.

Smaller War Plants Corp., or a successor, will carry over into the postwar period.

The bulk of government-owned war plants will not sell (except at sacrifice prices and the government won't dump them for fear of ultimate political scandal).

No further changes will be made in the contract renegotiation law.

The Arabian pipeline project will not be upset by Congress.

SAVE

by buying quality

**CARBON PAPER
ROLL PAPER
RIBBONS**

through
**Burroughs Discount
Purchase Plans**

**DISCOUNTS
10% to 40%**

An order for as little as \$10 worth of ribbons and carbon paper receives a 10% discount. Discount rates increase—up to 40%—according to the size of your orders, with purchases of carbon paper helping you earn larger discounts on ribbons, and vice versa. As an extra convenience, Burroughs makes deliveries as needed, to assure you fresh supplies and no storage problems.

Plain or carbonized roll paper and other quality supplies for practically every type and make of business machine also at substantial savings. For prices and terms, call your local Burroughs office or write direct to—

Burroughs Adding Machine Company
Detroit 32, Michigan



Burroughs
SUPPLIES FOR
BUSINESS MACHINES

BURROUGHS ADDING MACHINE COMPANY

4-F's for dirty work behind the lines but wants to be sure that, if it does, Congress won't count them against the authorized strength of the armed forces.

However, any legislation setting up national service for rejected men would have to clear some big obstacles, and the chances are that both the Administration and Congress will back away from the idea before it has a chance to come to a vote.

For one thing, the unions are dead set against any sort of labor draft. For another, manpower experts think that the number of 4-F's not already engaged in essential work is too small to justify a legislative fight.

Capital Gains (and Losses)

Supreme Court review of state legislation restricting labor union activity is assured. The court has agreed to look over the conviction of R. J. Thomas, president of the C.I.O. United Auto Workers, who precipitated a test of the new Texas law by failing to register as an organizer before addressing an organizational rally at Pelly, Tex. (BW—Oct. 2'43, p94).

With Congress taking an Easter recess, the tax simplification bill can't reach the House before Apr. 15. Once the Ways & Means Committee had agreed on a program involving no immediate change in the withholding system, it told drafting experts to take their time on polishing the legal language.

It's probable that the Army and Navy will request postponement until after the war of the government's antitrust suit against E. I. du Pont de Nemours & Co., Imperial Chemical Industries, Ltd., and Remington Arms Co. (BW—Jan. 15'44, p14). This is agreeable to the Dept. of Justice as trial then will coincide with postwar policy-making on participation of U. S. business concerns in international cartel agreements.

—Business Week's
Washington Bureau

THE COVER

To Russia next month, at the invitation of Premier Stalin, goes Eric A. Johnston, president of the Chamber of Commerce of the United States. Johnston, 46-year-old Spokane electrical merchandiser and manufacturer, will buy nothing, sell nothing. His mission to Moscow will be for the express purpose of scrutinizing the Soviet economic system with a view to postwar trade and competition. Ever an outspoken exponent of free enterprise, he nevertheless is convinced that capitalism and communism can work together without ideological wrangling.



Save Your Manpower
with the Drilling Power
OF
SKILSAW TOOLS

● Your plant will get more drilling done per worker... in less time... when SKILSAW DRILLS are on the job. They've got the extra power for load speed on all drilling from finest precision work to heaviest boring and reaming. They've got the perfect balance and compactness that mean easier, faster handling in any position.

SKILSAW DRILLS cost less to operate because they're quality-built throughout to stand up under today's round-the-clock production schedules. Your distributor can deliver most models to you from his stock. Ask him for a convincing demonstration on your own work.

SKILSAW, INC., CHICAGO 30
Skilsaw Tools are sold by leading distributors of hardware and industrial supplies



SKILSAW
PORTABLE ELECTRIC
TOOLS

MAKE AMERICA'S HANDS
MORE PRODUCTIVE!

HE
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THE OUTLOOK

BUSINESS WEEK

APRIL 1, 1944



"Manpower crisis in March," said Business Week on Dec. 11 (page 15). Army and Navy have precipitated the crisis right on schedule.

Now it's time for industry to appraise production prospects—both war and civilian—in the light of conditions created by the new draft regulations.

Prospects of any boost in civilian output are darkened further.

Ability of war plants to go on increasing their efficiency—their output per man-hour—to offset induction of young workers is impaired.

But Army and Navy may be past any acute worry over supply of munitions. "Pipelines" to European and Pacific war theaters are brimful; only new weapons now pose major problems of production.

•
Peak in munitions employment came in November; job rolls in war plants have been cut more than 200,000 since then. And output in both January and February was below the peak rate of November and December.

Yet Donald Nelson, in reporting that February war production about equaled that of January, declared that efficiency in labor utilization had been increased by another 1%. **If we could go on like that, we could lose a million munitions workers during 1944 and still maintain output,** but doubts of our ability are beginning to grow.

•
The country's efficiency, as measured by war output per man-hour, shot up 33% in the two years after Pearl Harbor. But this striking gain wasn't really a surprise to production experts.

First, there came the change from custom-building to mass-producing things like giant bombers, new types of naval vessels, intricate guns.

Not long after, shortage of manpower brought about the shakedown period in which cutting of corners kept output rising.

Still later, labor hoarders were forced to disgorge.

Then came job stabilization and controlled hiring in many critical areas.

Finally, turnover was reduced by a variety of causes, not the least of which was fear of layoffs due to cutbacks in munitions programs.

All of these aids to efficiency are, in the nature of things, one-shots; they can't be repeated. Each gain makes the next one just that much harder.

•
When the 365,000 deferred young men in industry (as of Feb. 1) are reclassified, the results are sure to be painful. War workers among them are out of uniform only because they have special skills; the remainder have been left in industries, already short of men, whose services are vital.

If the armed forces find that they also have to go up through the 26-to-30-year-olds (page 17), there will be real trouble on the production front. This applies even in the case of war contractors who can give up men to the draft and still maintain efficiency. All industry is in for some hard jolts.

Transportation is going to get tighter despite more new equipment.

Supplies of steel and coal and copper will drop. Efficiency in mills and mines has declined already (in contrast with better labor utilization in draft-favored munitions plants) and is certain to decline still further.

•
Output of bituminous coal has tumbled recently (chart, page 20). A shortage of at least 20,000,000 tons is expected by Solid Fuels Administration in 1944, even under favorable operating conditions. But conditions won't be good; the industry has 40,000 deferred young men, 10% of its labor force.

Home owners had trouble getting coal at times this last winter; next

THE OUTLOOK (Continued)

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winter, war plants will have to make less fuel go further. Educational campaigns to foster economical use of coal already are being whipped up.

Steel companies estimate that about 5% of their workers are in the 18-through-25 age group. **Loss of these young men might cut output 10%; even if replacements could be found, efficiency would decline further.**

Copper already has been hit by the Army's recall of "enlisted reservists" in the 18-to-21 age group who had been furloughed to work in the mines. WPB holds forth no hope that copper will get liberal deferments.

Output is sure to decline this year, and the government-owned stockpile of imported metal will be called on to make up a big deficit.

Railroad personnel needs, at a peak of 117,000 Nov. 1, have been eased slightly since the wage increase, declining to 87,000 Feb. 1.

However, the customary seasonal flow of workers to the farms will be felt from now on—and most of the losses will be laborers, mainly track workers who already are critically short.

One railroad crisis that people have been talking about isn't going to develop. That's the big jam in munitions traffic to the West Coast when the main emphasis shifts to the war in the Pacific.

Western roads couldn't handle that much freight (although the ports might be able to; turnaround time for a freight car at San Francisco docks today is about half as long as in New York—an average of three days against six).

Answer is that **much war goods will go east by sea just as they are going now.** New York to Bombay (via Suez, to supply Burma and China fronts) is about 9,400 statutory miles; San Francisco to Sydney is 7,760 miles.

Besides, cargo planes will continue to carry big loads from both the East and West Coasts of the United States.

High level of consumer spending shows up in the pre-Easter department store sales figures.

Retailers are being helped materially by the fact that they have just what the season calls for—large inventories of women's, misses', and children's ready-to-wear. (Value of such merchandise on hand, at the end of last year, ranged from 18% to 63% above a year earlier.)

Federal Reserve's unadjusted index of department store sales the country over pulled sharply ahead of year-ago levels five weeks before Easter, increased the margin of gain the following week (to 160 for the week ended Mar. 18, 1944, against 149 Apr. 3, 1943, the comparable date).

Earlier this year, department stores maintained a high level of sales despite poorer assortments of most merchandise than in 1943. The comparison is distorted, though, because there was panic buying of clothing in February, 1943, when sales shot up on fears of rationing.

Washington authorities are very much afraid they will have to slash industrial quotas of sugar to 60% of the 1941 base-period use.

Shortage of ships to pick up Cuban supplies—they're carrying war cargoes, not sugar (BW—Mar. 18'44,p7)—is the reason.

FIGURES OF THE WEEK

	§ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
THE INDEX (see chart below).	*239.7	†239.8	238.7	239.2	231.6
PRODUCTION					
Steel Ingot Operations (% of capacity).....	99.1	99.2	97.5	100.8	99.5
Production of Automobiles and Trucks.....	17,725	17,810	17,805	21,490	18,210
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$5,680	\$6,096	\$5,294	\$8,809	\$11,731
Electric Power Output (million kilowatt-hours).....	4,409	4,400	4,445	4,360	3,928
Crude Oil (daily average, 1,000 bbls.).....	4,385	4,385	4,423	4,344	3,896
Bituminous Coal (daily average, 1,000 tons).....	1,987	2,035	2,065	2,008	2,046
TRADE					
Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars).....	81	80	77	84	78
All Other Carloadings (daily average, 1,000 cars).....	51	51	52	67	50
Money in Circulation (Wednesday series, millions).....	\$20,934	\$21,006	\$20,696	\$18,714	\$16,065
Department Store Sales (change from same week of preceding year).....	+17%	+11%	-9%	+17%	-2%
Business Failures (Dun & Bradstreet, number).....	30	29	36	33	94
PRICES (Average for the week)					
Spot Commodity Index (Moody's, Dec. 31, 1931 = 100).....	251.1	251.2	249.3	248.2	248.8
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)....	163.2	163.2	162.4	160.6	159.9
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)....	222.2	223.3	221.3	217.4	208.8
Finished Steel Composite (Steel, ton).....	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton).....	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
Copper (electrolytic, Connecticut Valley, lb.).....	12.000e	12.000e	12.000e	12.000e	12.000e
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$1.66	\$1.66	\$1.63	\$1.47	\$1.39
Sugar (raw, delivered New York, lb.).....	3.74e	3.74e	3.74e	3.74e	3.74e
Cotton (middling, ten designated markets, lb.).....	21.16e	21.15e	20.88e	20.46e	21.31e
Wool Tops (New York, lb.).....	\$1.313	\$1.319	\$1.308	\$1.365	\$1.303
Rubber (ribbed smoked sheets, New York, lb.).....	22.50e	22.50e	22.50e	22.50e	22.50e
FINANCE					
90 Stocks, Price Index (Standard & Poor's Corp.).....	95.8	97.3	94.2	95.7	90.7
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's).....	3.70%	3.70%	3.73%	3.83%	3.99%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's).....	2.74%	2.74%	2.74%	2.70%	2.76%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average).....	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate).....	1-1/4%	1-1/4%	1-1/4%	1-1/4%	1-1/4%
BANKING (Millions of dollars)					
Demand Deposits Adjusted, reporting member banks.....	32,860	33,441	31,902	31,624	32,128
Total Loans and Investments, reporting member banks.....	52,401	52,885	53,267	50,143	42,004
Commercial and Agricultural Loans, reporting member banks.....	6,370	6,396	6,412	6,132	5,975
Securities Loans, reporting member banks.....	2,446	2,637	2,868	2,577	930
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks..	38,329	38,601	38,755	35,947	29,289
Other Securities Held, reporting member banks.....	2,897	2,852	2,842	2,952	3,222
Excess Reserves, all member banks (Wednesday series).....	900	1,300	1,077	1,893	1,632
Total Federal Reserve Credit Outstanding (Wednesday series).....	12,722	12,643	12,240	9,717	6,280

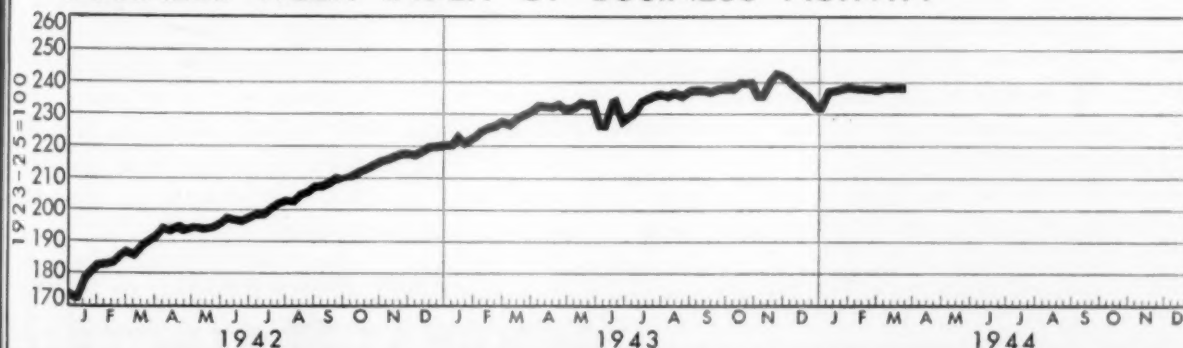
* Preliminary, week ended March 25th.

† Ceiling fixed by government.

‡ Revised.

§ Date for "Latest Week" on each series on request.

BUSINESS WEEK INDEX OF BUSINESS ACTIVITY





PUTTING THE PROPERTIES IN PLASTICS

ONE of the significant things about General Electric's self-contained plastics operation is that your product can receive the attention of experts in every phase of the business.

In a manner, it is comparable to submitting your proposed plastics part to a round-table discussion of chemists, designers, engineers, mold-makers and manufacturing men. From it can only come the plastics part that best suits your requirements.

The contribution of the chemist to the successful solution of your problem is interesting and

important. For "Putting the Properties in Plastics" is more than an alliterative phrase. It is the action taken by General Electric chemists to give your product the electrical, mechanical and chemical characteristics that its application demands.

This phase of G.E.'s operation is particularly pertinent at this time because most products, like most men, must work harder and longer in these times of war. Today's products must perform greater tasks. At One Plastics Avenue, chemists are helping them to do so.

Hear the General Electric radio programs: "The G-E All-girl Orchestra" Sunday 10 P.M. EWT, NBC. "The World Today" news, every weekday 6:45 P.M. EWT, CBS.

FIFTY YEARS IN THE PLASTICS INDUSTRY

BUY WAR BONDS

GENERAL  ELECTRIC

PT-100

Little Steel—The Big Issue

Future of wage formula hangs on whether the steel workers want that raise bad enough to strike for it. NWLB inquiry is little more than a stall until price control extension is settled.

Do the steel workers want a wage increase bad enough to strike for it?

That's the real question. It makes shadow-play of the hearing in progress before a special panel of the National War Labor Board. And that question won't be answered finally until all the elaborate procedure which began this week drags to an end.

Union at Bat—NWLB's steel panel is now listening to spokesmen of the C.I.O. United Steelworkers of America as they present voluminous data, involved arguments, and declaratory statements devised by C.I.O.'s top leaders and designed to "make a case" for breaking the Little Steel wage formula.

When the union's inning ends, representatives of 94 firms in the industry, employing more than 80% of steel's 605,000 wage earners, will have their say. Then the panel will ponder what it has heard, make "findings of fact,"

and offer "recommendations" to NWLB itself.

• **Snub in the Works?**—The board will study these findings and recommendations, perhaps call the principals back to Washington for a final one- or two-day public hearing, and then—so prevailing odds indicate—tell the steel workers politely, but firmly, that their wages are already at the Little Steel ceiling and that no further pay increases can be permitted.

If that is what happens, then at that point—probably about mid-May—the real battle to crash through the Little Steel ceiling will begin in earnest.

• **No Voluntary Retreat**—It is practically inconceivable that the Administration—working through the public members of NWLB—voluntarily would abandon the wage stabilization line and with it, derivatively, the price line. The Administration's strategy is to stall the

showdown on wages until Congress has acted on extension of price controls (BW—Mar. 25 '44, p17).

If the line is abandoned, it is much more likely, though by no means certain, that the retreat would result from threat of a strike, as in the recent railroad dispute, or from an actual strike—either of which would lead to government seizure of the mills.

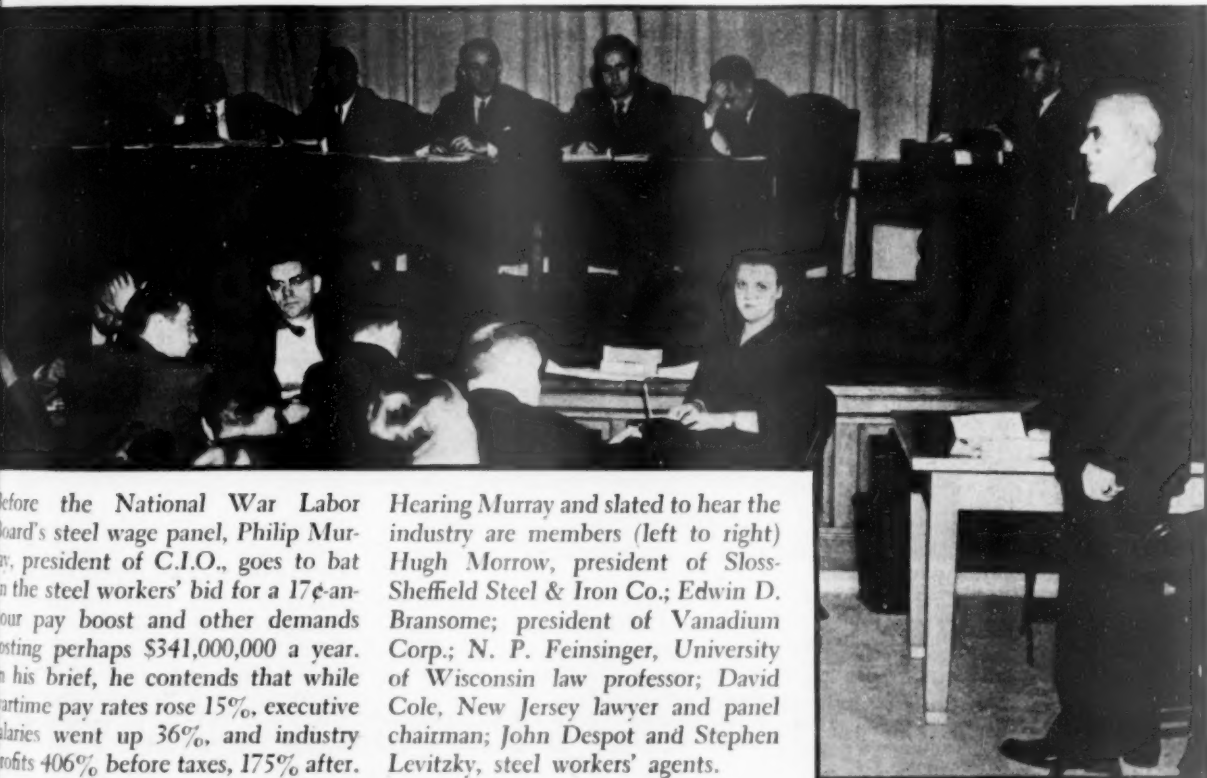
• **Best Chance**—Ruling out war and political developments which may help to determine the final outcome of the steel case, the best chance the Administration has of settling the dispute, short of a retreat on Little Steel or a national strike or both, lies in giving the steel workers enough satisfaction on other demands so that the 17¢-an-hour pay hike may be pigeonholed.

This fact makes C.I.O.'s supposedly secondary demands of much more than secondary importance.

• **Subsidiary Demands**—In the order of the importance which the C.I.O. attaches to them, these subsidiary demands are:

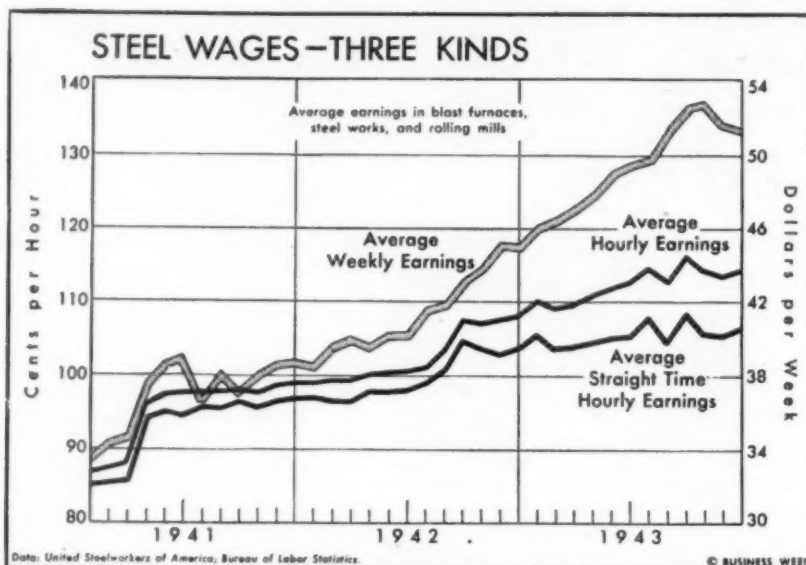
(1) A guaranteed minimum weekly wage, to be determined by multiplying the employee's average hourly earnings during the past year by 40.

(2) Severance pay of four weeks' wages



Before the National War Labor Board's steel wage panel, Philip Murray, president of C.I.O., goes to bat on the steel workers' bid for a 17¢-an-hour pay boost and other demands costing perhaps \$341,000,000 a year. In his brief, he contends that while wartime pay rates rose 15%, executive salaries went up 36%, and industry profits 406% before taxes, 175% after.

Hearing Murray and slated to hear the industry are members (left to right) Hugh Morrow, president of Sloss-Sheffield Steel & Iron Co.; Edwin D. Bransome; president of Vanadium Corp.; N. P. Feinsinger, University of Wisconsin law professor; David Cole, New Jersey lawyer and panel chairman; John Despot and Stephen Levitzky, steel workers' agents.



C.I.O.'s steel workers, arguing before a National War Labor Board panel for a 17¢-an-hour pay hike, mean a 17¢ boost in average straight-time earnings (the bottom line). Employers, however, will be asking NWLB to take into consideration two other steel

wage figures, average hourly earnings which include overtime payments (the middle line), and weekly earnings which, minus tax deductions and war bond payments, represent the actual amount in the steel worker's pay envelope (the top line).

for all employees having one year and less than three years of continuous service, and eight weeks' pay for all having three or more years of service.

(3) A contract provision that any claimed wage inequality may be processed through regular grievance machinery.

(4) A general wage adjustment in all applicable plants to eliminate any outstanding geographical wage differential.

(5) A checkoff of union dues.

(6) A fixed number of no more than three occupational classifications at fixed pay rates for all mechanical jobs.

(7) Sick leave of seven days for all employees with less than three years' service; 14 days for those with over three years.

(8) One week's vacation, or vacation pay, for employees with three years of service. Two weeks for those with over three years.

(9) A wage premium of 5¢ an hour for all employees on the afternoon shift; 10¢ for all on the night shift.

(10) Thanksgiving, New Year's Day, Independence Day, Labor Day, Christmas, and Memorial Day to be considered holidays and all work done on these days to be paid for at time and a half.

(11) Company establishment and support of group insurance plans to include life, accident, and dismemberment benefits equal to 75% of average annual earnings with a minimum coverage of \$1,500; disability benefits of 75% of weekly average earnings payable for 13 weeks; hospitalization and surgical benefits covering employees and dependents at \$6 a day for disabilities, \$50 for hospital costs, \$150 for surgical costs.

Rein on OPA

Supreme Court's decision limits price agency's intervention in utility rate cases to the bounds set by regulatory commissions.

OPA's hopes of taking over control of utility rate making were ended this week by a six-to-three Supreme Court decision which held that OPA may intervene in utility rate cases, as agent of Economic Stabilization Director Fred M. Vinson, only to the extent permitted by the public regulatory commission having jurisdiction.

The decision was in sharp contrast to the sweeping support given OPA by the court in a series of rulings upholding the price control act (page 5).

• **District Agency Upheld**—The court's "anti-utility bloc"—Justices William O. Douglas, Frank Murphy, and Hugo L. Black—dissented from the ruling which was written by Justice Owen J. Roberts.

The decision upheld an order of the District of Columbia Public Utilities Commission which granted the Washington Gas Light Co. an annual rate boost of \$201,000.

• **Background**—When OPA intervened before the District Commission at the

Stabilization Director's orders, it sought to abrogate the sliding scale agreement under which Washington's gas rates have been reviewed annually since 1918 (BW—Mar. 13 '43, p. 31).

Since abrogation of the agreement was not otherwise before it, the District Public Utilities Commission refused to consider evidence on the matter. OPA failed to produce evidence as to the "inflationary" effect of the proposed \$201,000 increase, which purpose alone it had been allowed to intervene; so the District Commission ordered the boost.

OPA appealed on the ground that had been denied a "full and fair hearing," was upheld by the U. S. District Court, reversed by the Court of Appeals and reversed finally this week by the Supreme Court.

• **Can't Enlarge Issues**—The Supreme Court held that "one of the most important procedural rules is that an intervenor admitted to the proceeding as it stands and in respect to the pending issue but is not permitted to enlarge the issues or to compel an alteration of the nature of the proceedings."

• **Dissenting Viewpoint**—The court further held that it had "been asked to infer from a general expression of congressional policy, the limitation of existing powers conferred by law on regulatory commissions . . . and the endowment of a different federal agency with new and superior rights and powers. That we are unable to do."

The dissent argued that Congress intended regulatory commissions "to control a sector of the front in the fight against inflation," and insisted that while Congress "did not remove the established standards for rate making, it did not intend commissions to proceed in disregard of . . . emergency price control and unmindful of the dangers of general rate increases."

• **Power on Unregulated Rates**—When OPA was snubbed in its attempt to control rates within the jurisdiction of constituted regulatory body, it prepared to act under a previous opinion of the Supreme Court in the *Davies Warehouse Co.* case (BW—Feb. 12 '44, p. 7).

The court's opinion in that case presented to OPA the possibility that it may take control over electric, gas, and gas rates not otherwise regulated by a public agency. OPA ordered utilities in states where no regulation existed to file notice of intent to raise rates.

• **May Fix Ceilings**—Within 60 days OPA will decide whether to establish area ceiling rates. The expectation is that ceilings will be established in unregulated areas. They may be lower than existing rates, in line with OPA's policy of cutting profit margins wherever it can. Traffic will bear it to hold down the over-all cost of living.

Draft Heat Is On

Only 50,000 occupational deferments will survive the new screening process, but industry will profit by physical rejects.

War industry as a whole will have to get along with fewer than half of the 365,000 employees under 26 years old who held occupational deferments as of Feb. 1. This fact now stands out plainly as the dust of the fight over new draft regulations begins to settle.

• **Through a Fine Screen**—Briefly, the latest plan is to divide all draft-eligible men in the 18-to-26 bracket into two age groups and put them through a fine screen.

Men 18 to 22 may receive deferment if they are physically unfit or qualified for limited service only. No other grounds will be recognized, and few, if any, exceptions will be made to this rule.

In the 22-to-26 bracket, Selective Service will allow a rigidly restricted number of occupational deferments in addition to physical rejections.

• **A New Committee**—The job of parceling out these occupational deferments for men 22 to 26 falls to a new inter-agency committee headed by War Manpower Commission Chairman Paul V. McNutt.

Represented on the committee are the twelve government agencies most concerned with the manpower situation and the impact of the draft on war production—War Manpower Commission, Selective Service, Army, Navy, War Production Board, Maritime Commission, Office of Rubber Director, Solid Fuels Administration, Petroleum Administration, War Shipping Administration, War Food Administration, and Office of Defense Transportation.

• **Essentials to Be Listed**—This committee will do for key industrial personnel much the same thing that WPB's requirements committee does for materials. Each agency, acting as claimant for the industries it represents, will bring in a list of the deferments for men under 26 that it considers essential to meet production goals.

The full committee then will go over these lists, sweating them down until it arrives at a total which, in its opinion, represents the minimum number of deferments that industry must have to keep its most urgent programs on schedule. As the final step, the committee will assign under-26 draft deferment quotas to specifically listed urgent programs for designated plants.

• **Possibly 50,000 Deferments**—Nobody knows how many deferments the com-

mittee will decide it must allow. (One of the reasons for the confusion of the past few weeks was that Selective Service, on orders from President Roosevelt, set out to make a clean sweep of deferred men in the 18-to-26 age bracket without having any reliable statistics on which industries were employing them.) As things look, however, the lists presented by the claimant agencies will add up to around 100,000 on the first count. The final quota of deferments probably will run about half that.

Assuming that McNutt's committee grants a total of 50,000 occupational deferments, more or less, the arithmetic of the deferment situation would stack up like this. Of the 122,000 men under 22 who now hold occupational deferments, employers could expect to salvage only about 40,000 who will be rejected by the Army for physical reasons. Of the 243,000 in the 22-to-26 bracket, they could expect to keep about 81,000 rejects and the 50,000 occupational deferments. Thus, on the final division, the Army would get around 195,000 of the 365,000 men 18 to 26 now deferred; industry would keep about 170,000.

• **A Question of Urgency**—The occupational deferments granted by McNutt's committee will be concentrated at points of greatest urgency, not spread through industry generally. WPB, when it thought that it was going to have the job of dividing up the deferment quota, listed eight programs so urgent that key men working on them would have to be deferred regardless of the Army's de-

mands. These were: (1) landing craft; (2) synthetic rubber; (3) 100-octane gasoline; (4) high-tenacity rayon; (5) radar and certain secret weapons; (6) combat aircraft; (7) submarines; (8) tires and tubes.

Production officials say privately that the supply of other munitions is so large and production is going so well that they could afford to pull out deferred workers and risk a drop in output. Hence, in putting in its claims, WPB will concentrate on the urgent programs.

• **Mines and Rails**—Two industries—coal mines and railroads—probably will present the committee with a problem even tougher than the urgent programs. Their worst trouble is a scarcity of ordinary labor, not key personnel. This means that the committee will have to decide whether it can spend part of its quota on pick-and-shovel men, although it is forced to pass up key personnel in other industries.

Some manpower experts think the only answer will be to designate key mines—pits with particularly high productivity—and key lines—which serve particularly important territory—instead of trying to work coal and rail deferments on the basis of key men.

• **Pressure Will Ease**—While all this screening of the under-26 deferments is going on, pressure on the 26-and-over group will ease up. The normal processes of the draft—review of expiring deferments, induction of men just turned 18, and the like—will go on as usual, but review of occupational deferments and the



Favoring a limited rather than general labor draft, Donald Nelson, War Production Board chairman, explains to Rep. John Costello (left), chairman of a House Military Affairs subcommittee, his reasons for indorsing com-

pulsory war industrial service for 4-F's and men over 38. Selective Service is pushing a plan to induct the same groups for limited military service, a move counted on to drive many draft-exempt men into war industries.

draining of the 3-A class (pre-Pearl Harbor fathers) will stop except where men under 26 are involved.

Screening of the under-26 class probably will be complete within another 30 days or so, but unless the new plan has broken down entirely by then, the whole 26-to-37 age group will not be thrown back to the mercy of quota-short draft boards. The odds are that a 26-to-28 or a 26-to-30 bracket will be opened up for screening, which will again postpone the heavy drain on the over 30 group.

• **To Meet a Deficit**—Selective Service estimates, on the basis of Feb. 1 figures, that it would be 240,000 men short of Army and Navy calls by July if it tapped all available sources except the occupational deferments. Screening of the 18-to-26 group should make up all but about 45,000 of this theoretical deficit.

The remaining shortage isn't large enough by itself to warrant a crackdown on deferments of men over 26, but Selective Service expects that after July 1, when the armed forces will have reached full strength of 11,300,000, it still will have to provide 100,000 men a month for replacements.

• **Only 50,000 a Month**—To meet this replacement demand, Selective Service will have only 50,000 men a month coming in from the group of men just turned 18. Hence, the outlook is that the screening process will work up gradually from age bracket to age bracket, stopping only when the end of the European war is definitely in sight.

Portal Pay O.K.'d

Supreme Court ratifies principle of travel-time pay in iron mines. Coal and other industries worry about retroactivity.

Now John L. Lewis can say, "I told you so," as a result of the Supreme Court's validation this week of the principle of portal-to-portal pay. The court was divided, 7 to 2.

More importantly, the National War Labor Board with a clear conscience can say no to those labor leaders who demand wage increases on the argument that they are entitled to "get theirs" because "John L. Lewis got his." The board can retort that the United Mine Workers got nothing more than was due under the law.

• **Not Directly Involved**—Actually, the coal miners were not directly involved in the case decided this week, brought on appeal from the lower courts by the Tennessee Coal, Iron & Railroad Co., Sloss-Sheffield Steel & Iron Co., and Republic Steel Corp.

But in sustaining a 1941 ruling of the Wage-Hour Division that iron ore and other metal miners were entitled to pay for the time spent in traveling from the pit head to the working face of the mine and back again, the Supreme Court enunciated a doctrine that

applies to the still pending coal case controversy.

• **Southerners Hold Out**—That controversy involves two separate instruments: (1) the agreement, approved by the NWLB, which Lewis negotiated with Secretary Harold L. Ickes when the latter was ordered, in his capacity as Solid Fuels Administrator, to take over the coal mines, and (2) the contract running until Apr. 1, 1945, which Lewis negotiated with the mine owners by which the Southern Coal Producers Assn., representing 30% of the industry, refused to accept because of the portal-to-portal pay provision.

Because the Lewis-Ickes agreement is still the governing instrument while the U. S. holds technical title to the mines, all coal miners are being paid on a portal-to-portal basis. But in behalf of the southern operators, former Sen. Edward R. Burke has brought action challenging the legality of this payment provision.

• **Burke Isn't Worried**—Having won a lower court decision already, Burke professes not to be worried about what will happen when his coal case reaches the Supreme Court, despite its ruling this week in the iron case, which made hash of tradition in the ore fields. He points out that in the long history of coal collective bargaining, there is no precedent for payment of travel time, whereas in the metal industries, miners usually collected at least for a one-way trip prior to the Wage-Hour Division ruling.

It was because of this lack of precedent, Burke contends, that the Wage-Hour Division decided against ordering portal-to-portal pay in coal when it ruled that such payment was required under the Fair Labor Standards Act in metal mining.

• **Will Eye Travel Time**—If it were not for the opposition of the southern operators, the contract which Lewis signed with 70% of the industry would be in general effect now and the government would have returned the mines to private ownership. When this eventually happens and the contract comes before NWLB for final ratification, the board has indicated (at the time it approved the Lewis-Ickes agreement) that it will have to be satisfied that the travel time, allowed in the agreement, actually averages out, as specified therein, to 45 minutes a day.

Although principal interest in the portal-to-portal pay issue now focuses on its application in coal, the metal-mining industry is by no means ready to close the book on the question, for the miners inferred from the Supreme Court decision that the travel payments are due them back to 1938 when the Fair Labor Standards Act was passed, rather than to May, 1941, when the Wage-



A FRIENDLY BOMBING

Crew members of one Army Flying Fortress have the distinction of making an operational bombing flight over the United States and dropping 250-lb. bombs. Their target was a Yellow-

stone River ice jam that threatened Miles City, Mont., with a disastrous flood. Using the "pin-point" technique, the bombardier straddled his objective with 13 delayed-action missiles, one of which smashed the jam's keystone (arrow)—saving Miles City.

Division ordered payments into
 This belief is based on the argu-
 that mine owners incurred lia-
 from the date of enactment be-
 the law lodges no discretionary
 in the division.
 other Industries Worry—C.I.O.'s In-
 ternational Union of Mine, Mill &
 Alter Workers has estimated that the
 for retroactive payments now due
 amount to \$2,000,000. If the same
 is applied ultimately to coal, the
 will be many times as great. And
 other industries are worrying over what
 abilities they may unwittingly have
 incurred through failure to pay for
 which workers necessarily spend in
 preparing for or finishing up the day's
 work. The C.I.O. Packinghouse Work-
 Union already has asked for "portal-
 t" pay for time spent dressing
 undressing (BW—Jul.24'43,p101).

Airline Issue

**Proposed American-Export
 combine spotlights a question:
 Shall there be one or many U. S.
 postwar overseas air services?**

Proposed purchase by American Air-
 lines of a controlling interest in Ameri-
 can Export Airlines brings into sharp
 focus the basic issues in the fight over
 postwar policy affecting overseas air-
 services.

What Kind of Competition?—The
 questions: Shall there be only one Ameri-
 can flag line to compete with foreign
 services, such as Britain's Imperial Air-
 lines, Germany's Lufthansa, and Air
 France? Or shall there be competition
 well among U. S. lines operating
 abroad?

If the latter policy is decided on (and
 seems to have the inside track in
 Washington now), the American-Export
 combine will be in a much stronger posi-
 tion to compete with Pan American
 Airways, the country's No. 1 overseas
 operator, than Export was alone.

A Valuable License—Under the stock
 purchase plan, American Airlines would
 acquire Export's permanent route per-
 mit, issued by the Civil Aeronautics
 Board, to operate between New York
 and Portugal. That is the only overseas
 permit CAB has issued outside of Pan
 American's. And Export won it only
 after three years of battle in which it
 met Pan American's opposition at every
 turn.

Export Airlines finds in the proposed
 deal an effective answer to CAB's order
 that it get rid of American Export Lines
 steamship) as a controlling parent com-
 pany. This order was issued in accord-



A. N. Kemp (left) of American Airlines and W. H. Coverdale of American Export Airlines effect a combined operations plan, but Congress has yet to say whether there'll be one or many airlines to Europe after the war.

ance with the Civil Aeronautics Act,
 which stipulates that surface transporta-
 tion companies shall not control air-
 lines, with certain exceptions.

• **Controlling Interest**—If the proposal
 goes through, American Airlines would
 get 120,000 shares or 51.4% of Ex-
 port's total common stock for \$3,000,-
 000. The parent steamship company
 would retain 56,000 shares, a minority
 interest to which the law takes no
 exception. The \$3,000,000 would pay
 off Export's debts and leave some re-
 serve, but not enough to buy many
 modern airplanes. However, the com-
 bined resources and credit of American
 Airlines and Export are considered ade-
 quate for all needs.

The agreement entered into by Ex-
 port and American will not be valid
 until approved by CAB, but both lines
 made pretty sure beforehand that the
 board would O.K. the tieup. There is
 nothing in existing law against such a
 merger; CAB apparently welcomes this
 effective answer to its order that Ex-
 port divorce the ship company.

• **On the Sidelines**—Anxiously watching
 progress of the American and Export
 deal is the group of 16 U. S. airlines
 which last July declared for a govern-
 ment policy of open competition for
 foreign business. (Export later became
 the 17th member of this group.)

On the other side of the fence is
 Sen. Pat McCarran of Nevada, who
 took the American-Export announce-
 ment on the chin, because he had just
 introduced a bill which would authorize
 a billion-dollar corporation—virtually a
 U. S. aviation cartel—in which any or
 all American flag foreign air route

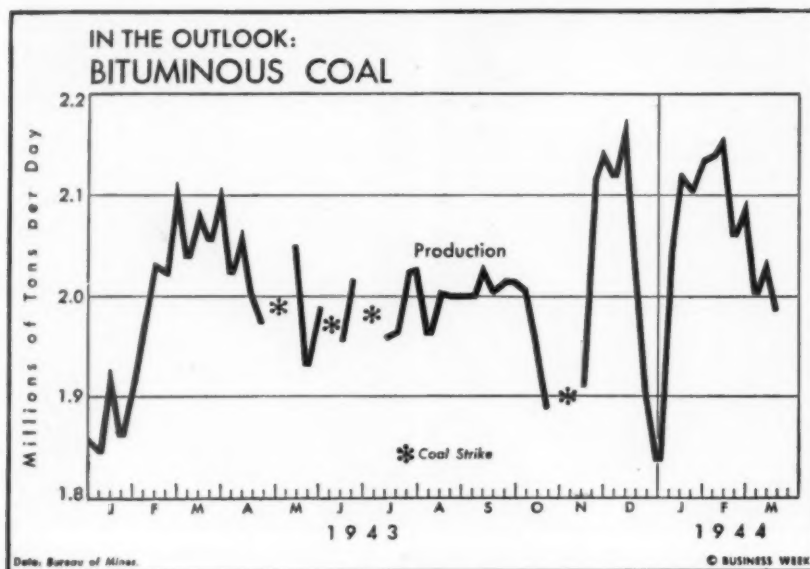
operators could hold stock. This is the
 single-management, semifederal foreign
 air agency advocated by Pan American,
 which hopes to be the nucleus of any
 such organization.

• **One Strike Already**—McCarran's bill
 will start through the legislative machin-
 ery with one strike against it. The In-
 terdepartmental Committee on Interna-
 tional Aviation has been studying the
 overseas airways problem for some time,
 and Washington expects it soon to make
 public its report favoring overseas com-
 petition. And Washington, as well as
 American and Export, is betting that
 President Roosevelt and Congress will
 stand behind the committee. McCarran,
 who supposedly was aware of the find-
 ings of the report, obviously tried to
 beat the gun with his bill.

• **Several Attempts**—Behind the McCar-
 ran bill is a long history of legislative
 maneuvering to revise the Civil Aero-
 nautics Act of 1938. Over a year ago,
 Rep. Clarence Lea of California offered
 a bill dealing with many obsolescent
 sections of the law. Opposition of sur-
 face transportation interests and disunity
 among various aviation groups finally
 killed it in the House Rules Committee.

Rep. B. Carroll Reece of Tennessee
 then offered a substitute bill incorpo-
 rating the ideas of a minority of the
 Interstate Commerce Committee. But
 controversies left the way open for still
 another bill revising the present law.
 This the McCarran bill does, but it
 also includes the proposal for a single-
 management corporation to operate in-
 ternationally.

• **British Opposition**—Important to the
 background is the ICIA report. Early



Coal supplies may have been a bit skimpy, but the country has succeeded in getting through the 1943-44 winter with nothing worse than minor shortages of localized character. However, the danger signal for next winter's coal supply went up when bituminous output fell below 2,000,000 tons a day, climaxing a five-week drop; and 2,000,000 tons a day is the rock-bottom rate needed to meet 1944 demand (page 9). The past year's strike-

checked record shows how longer hours have lost the race to dwindling manpower. The increase from five work-days to six early in 1943 helped, but only temporarily. Addition of an hour to each work day lifted the rate in November. Holiday absences proved only a momentary interruption, but the latest decline is taking on serious proportions. A major factor: The draft has left mainly older men who can't stand the long hours.

in the war, the British became alarmed because the United States has most of the transport planes, most of the world routes, and plenty of crews to fly them. The President appointed the committee to write a policy of our own as a basis on which to deal with other countries concerning routes, bases, and rights of entry.

Meanwhile Adolph Berle, Assistant Secretary of State and chairman of the committee, with the President and Secretary of State Cordell Hull chiming in from time to time, started horse-trading with the British. Sen. Champ Clark of Missouri, chairman of the aviation subcommittee of the Senate Commerce Committee, decided that the Administration was assuming too much responsibility. He called on Roosevelt and Hull and got them to agree to stop all negotiation till the Senate could apprise itself of the facts.

• **Senators Annoyed**—Now that hearings are about completed, some members of the Senate committee are annoyed at McCarran, who has a son-in-law on Pan American's New York staff, for tossing in a bill just as they were preparing

one of their own. There is strong support for the chosen instrument theory in the Senate, but that support probably will not rally behind McCarran's bill.

Export Airlines currently is operating two routes on one temporary permit: New York to Ireland, and New York to Africa via South America. These services are under contract to the Navy, which, however, permits the carriage of civilian traffic and passengers.

• **Another Cloud**—Export's permanent permit from New York to Lisbon is not in use. Another cloud on that horizon is that Pan American has exclusive landing rights in Portugal. Either the Portuguese government or the United States could abrogate the agreement negotiated by P.A.A. In addition, Export has applied for routes to South Africa by way of South America, and from Natal, Brazil, through the Mediterranean to Bombay.

American Airlines, which has by far the largest system in the United States and enters both Canada and Mexico, has applications in for lines from Chicago, Detroit, New York, and Boston to London.

No Head Start

Highly competitive auto industry leaders will stick together against plan if WPB propose emergency building by one firm

The auto industry is opposed to an emergency new-car program which would permit one company to resume production in advance of the others. And industry leaders will so inform WPB later this month when they go to Washington, at WPB's invitation, to air their views, company by company on reconversion.

Manufacturers received the invitation simultaneously with the news that WPB chiefs are planning a one-company run of two hundred thousand cars for workers in advance of industry-wide conversion (BW—Mar. 25 '44, p. 5). The called the scheme wholly impracticable.

• **Survey Profit Points**—In the motoring city it is believed that the most important fact to be ferreted out of the Washington discussions will be an industry estimate on its minimum profitable production volume. Each company has been asked to supply this figure. The all-over aggregate is expected to be around 2,000,000.

The significance of this figure is that it will mark a line beyond which the industry will welcome production, before which it will not.

• **Oppose Head Start**—Corollary to this is the conviction that automobile production should be authorized only as soon as WPB feels that it can spare men, materials, plant, and components for that volume. That point, Detroit believes, will only be reached at the end of the European war, and not before that time.

Should WPB make an oblique move toward lower automobile output by formally launching the suggestion that one company alone produce and distribute a quantity of cars through its own channels and those of the rest of the industry, the automobile president are prepared to assert their unwillingness to let any firm get a head start on the others.

And Washington talk of having the cars of the selected company—speculation points to Hudson—made under contract with the Defense Plant Corporation with their distribution strictly controlled, has not yet quieted the basic objections.

• **Kaiser Not Invited**—Participating in the Apr. 17 meeting will be a committee of presidents of every company that was making cars when war uprooted the assembly lines. Henry Ford has been

invited and so has Powel Crosley, Jr., whose Crosley car made an almost imperceptible introductory dent in the market in 1939.

Significantly enough, would-be automobile producers, such as Henry Kaiser and Andrew Higgins, have not been recognized either by an invitation to the meeting or by space on the program. Quite evidently, WPB plans to maintain the status quo ante at least until all the going car companies are back in civilian production.

● **Ideas on Controls**—Controls will take up a fair share of the program. The auto industry leaders will bring to Washington their ideas on how and when controls should be progressively removed on materials and equipment, even on technical reconversion planners whose assignment to postwar jobs must come many months before finished cars are completed.

Efforts will be made by the industrialists, and WPB, to develop a formula for disposal of government-owned equipment and plants. The industry men

have been asked to list which plants and which machines they will want for postwar production. Just as important, they have been asked to make suggestions on ways for taking care of the removal of DPC-owned equipment from private plants.

The viewpoints of the industry on the amount of experimental materials needed for reconversion testing will be explored.

Summary will be sought of the volume of machine tool, die, fixture, and jig buying on the programs of each company.

● **Typical Reaction**—Plenty of differences of opinion will be aired, but on the question of one company's getting the jump, the highly competitive automobile people will stick together. In fact, the Detroit angle is that they still don't really expect it to arise. Typical reaction by a manufacturer:

"If one fellow had the components and men and materials to get out cars, we'd all have. I don't think we'll hear a serious suggestion of that sort."

More Implements?

It won't silence farmers' cries, but WPB hopes production schedules can be met this year and further shortages averted.

Farmers' squawks about the scarcity of tractors and implements in dealers' stocks, and their lamentations over reports that the United Nations Relief & Rehabilitation Administration would ship abroad substantial numbers of farm machines (including 30,000 tractors, 80,000 plows, 50,000 mowers, and 40,000 harrows) produced several results in Washington last week.

● **Less Than 2%**—President Roosevelt told his press conference that less than 2% of American farm machinery supplies has been shipped abroad under lend-lease, most of this to Australia, New Zealand, and the United Kingdom, to help feed U. S. soldiers. He offered assurances that farm machinery will not be shipped overseas through UNRRA unless Congress appropriates the funds, and that American needs will be considered first.

Senators Bennett C. Clark and Guy M. Gillette introduced a resolution for investigation of the farm machinery program and any plans for exports. WPB Chairman Donald Nelson told the Senate Banking & Currency Committee that he is concerned over prospective shortages of farm machinery but hopes that schedules can be met this year. For the year ending June 30, 1944, the quota is 80% of 1940 or 1941, and for the following year it is 100% of the same base.

Charges and countercharges fill the air as professional friends of the farmer urge speed. But those Washington officials in the War Food Administration and WPB most directly responsible for getting the machinery to the point of use maintain that all is going about as well as could be expected.

● **Depends on Draft**—Whether this record can survive the drafting of deferred 18-26-year-olds remains to be demonstrated. Typical plants show 16% of employees are in this age group. One manufacturer is already so short-handed that he is using draftsmen and engineers two hours a day on his combine line.

The tractor program for the year ending July 31 calls for making 255,000 units and is proceeding at a production rate estimated by Washington at around 23,000 per month.

● **Allocations Were Late**—Because the necessary allocations and industry orders cleared through WPB too late to get the plants producing at the stepped-up



TO MARKET BY AIR

Lush tropical fruits and vegetables—all on call within 30 hours by plane from Northern U.S. states—are displayed as a postwar teaser at a Detroit meeting of airline men, merchants, and government officials to hear preliminary findings of Wayne University's air cargo survey. Conclusions: A sizable market for air transportation of produce—as much as 3.72% of all vegetables—would exist if freight charges could be cut from the present 30¢ a ton-mile to 7¢. Only one-tenth as much would be flown if the rate were cut to 15¢ a ton-mile, but even

this volume would represent about 20,000,000 ton-miles—but such goals are far distant. More heartening, as far as the foreseeable future is concerned, are conclusions of a Bureau of Agricultural Economics survey pointing out that in the off-season tomatoes flown from Florida to Detroit could be marketed at about the same price as rail-shipped products, thanks to savings principally in packaging and ripening costs. In the case of off-season strawberries, the crating costs could be saved, but the air-shipped berries would probably cost about 5¢ a quart more as a premium for an alleged quality product.



BARGAIN SALES

Early-bird queues outside London stores awaiting the sale of "utility" garments at reduced ration rates are proof of Britain's belief in an early victory. Faced with uncertainty in 1942, Britain produced great quantities of low-priced utility garments in standard styles, materials, and colors (BW—

Jan.31'42,p34) to meet anticipated clothing shortages. Individualists in dress, most Britishers thought them no bargains, patched up prewar clothing, and spent their ration points for higher-priced garments. Caught with an uncomfortable surplus, Britain is offering the standardized apparel at half-coupon rates, will use the excess for the relief of Europe's needy.

rate until many months of the normal manufacturing season had elapsed (BW—Oct.16'43,p67), the industry last fall faced a sizable production deficit from the official schedule.

Two major companies, Ford-Ferguson and John Deere, have made up this shortage and are now ahead of schedule. The rest of the companies, Washington reports, are close to or a little behind schedule, but gaining monthly.

• **Reconversion Delayed**—What can happen to a firm's manufacturing schedule in wartime is indicated by International Harvester Co.'s experience. Back in the days when WPB's civilian requirements unit believed that farmers could get by with very little new machinery, the company's 1942 quota shrank to a few all-purpose Farmall H and M models, none of the little Farmall A and B. Then, in the A and B production-line space, the plant took on Army and Navy ordnance contracts.

Tractor quotas were stepped up by WPB last fall, and Harvester was told to expect immediate cancellations of these munitions contracts in time to permit producing A and B tractors by January. Instead, termination dragged; so small tractor output will start some time in April. Once the little machines begin rolling off the line, Harvester should catch up rapidly on its tractor schedule

and by July 31 should substantially exceed its total commitment.

• **A Darker Picture**—Less satisfactory than the over-all tractor picture is the situation on some other machinery, particularly tillage and planting tools. Production is not gaining on the accumulated deficits sufficiently to provide for the planting-season needs of all southern farmers, but prospects for the Corn Belt are brighter. The tabulation below is taken from the production summary of a large manufacturer and is probably typical of the major outfits in the industry. Quantities are in index numbers, not actual production units.

Products	Short on Feb. 26	March Prod. Quota	Total Needed Apr. 1	March Prod. (Est.)	Short Apr. 1 (Est.)
Planters (corn & corn-cotton)	25	27	52	30	22
Grain drills	9	11	20	17	3
Cultivators (tractor)	12	71	83	40	43
Combines	15	15	30	18	12

• **Marking Time**—Lacking components, especially malleable castings, this manufacturer is barely holding his ground in production of planters but, by concentrating his available labor, is practically abreast of his schedule for drills. Because tractor cultivators are not yet needed in most of the U. S., he is letting this part of the program mark time while he focuses on other items.

Combines will be needed soon for the small-grain harvests of the Southwest, where there is a sharp shortage of these machines. Hence he is bearing down on this product enough to meet the demands of his southwestern dealers.

• **They're Skeptical**—Farmers openly doubt any such figures, inquire where the machinery is going, since they cannot get it. No one-syllable explanation is possible. Several factors influence the situation, and two of these account for much of the turmoil.

First, the farm machinery industry in prewar years conducted its manufacturing operations in strict regard for the needs of the growing seasons. It allowed enough time for the most economical and satisfactory distribution of products to users well in advance of field needs.

• **Slowed by War Control**—Since war production controls were imposed, each year's authorizations have come through too late to permit making all of the goods in time for this-season use. The manufacturer found himself still delivering corn planters when the corn was knee high, and corn pickers after the crop was in the cribs.

Amendment B to Order L-257, issued last February, is the production order for the year commencing July 1, 1944. It came out in ample time, and manufacturers expect to get away to their first running start since 1941.

• **Passed the Buck**—Second, most county ration boards took the easy way of giving purchase certificates to deserving farmers just as rapidly as the farmers applied, halted only when their year's quotas ran out. This passed the buck to the implement dealers and manufacturers. A farmer who has his certificate wants his machine immediately.

With enough certificates in farmers' hands to absorb all the tractors authorized for manufacture through July 31, 1944, there is an apparent shortage of tractors in respect to certificate holders. This shortage will disappear by July 31.

U. A. W. STUDIES HOUSING

C.I.O.'s socially minded United Automobile Workers Union has done a lot of thinking about postwar housing. Results are summed up in a 120-page booklet, "Memorandum on Post-War Urban Housing" (BW—Mar.25'44,p15).

The union advocates metropolitan regional planning agencies to unify the approaches to all problems dealing with housing. The agencies would designate major and minor shopping areas, sites for public buildings, parks, and recreation grounds.

U.A.W. would prevent the spread of

"Unforeseen events . . . need not change and shape the course of men's affairs"



THAT MAN IS HERE AGAIN

LIKE a million other good Americans, he's giving another pint of blood to save a soldier's life.

He's always been interested in the protection of his fellow men. Before the war, as an insurance man, he devoted his time and energy toward protecting them against unforeseen events. He still does that today . . . and more.

The pint of blood he's giving will help some soldier return to battle again the forces that would destroy precious liberties of all Americans.

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of insurance people—both men and women—among the great mass who are giving their utmost to the war effort. They're giving their free time to the sweat and grime of war industry, after hard days at their own jobs. They're giving their blood and dollars . . . giving everything they possibly can to help win a war.

In these and in many other ways they're helping write the biggest insurance policy of all time . . . just as every other red-blooded American is doing today. Maryland Casualty Company, Baltimore.

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7 Particles Bear Like Electric Charges	8 Insoluble in Acids and Alkalies	9 Black and Opaque
10 Gas Adsorbent	11 Little Photoelectric Effect	12 Miscible with Most Fluids
13 Films Adhere Tenaciously and Dry with Sharp Edges	14 Microscopically Fine Particles. Penetrates Fine Pores	15 An Excellent Suspension



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"dag" colloidal graphite has a number of valuable physical and chemical properties. Fifteen of the more important ones are listed here. Check them over. Pick out those that will help you and then let our engineers give you the benefit of their experience on how best to utilize them.

"dag" colloidal graphite is a smooth black liquid concentrate and is used to produce a dry or fluid film, a surface coating or as an impregnating agent. Typical examples of its use are as a die or punch lubricant and in the manufacture of copper oxide rectifiers.

FORGING
DIES



Die and punch life is increased and forgings having better finish are produced to closer tolerances with "dag" colloidal graphite treated lubricants. Properties 1, 3, 13, 14 and 15 are utilized in this application.

COPPER
OXIDE
RECTIFIER



Excellent electrical contact is obtained between copper oxide discs and adjacent metal electrodes in rectifiers when dry coatings of "dag" colloidal graphite are used on the crystalline oxide surfaces. Properties 2, 6, 13 and 14 are utilized in this application.

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**ACHESON COLLOIDS
CORPORATION**
PORT HURON, MICHIGAN

industrial blight, said to affect one-third of the nation's urban areas today, by the creation of protective belts which could be used effectively for high-speed trafficways, community gardens, or even landing strips. Slum clearance would be speeded by time limits on use of substandard buildings, restrictions on population density, and special taxes, all designed to reduce income values of such property.

When private building programs failed to provide facilities for low-income groups, the union could call for government action. U.A.W. emphasized that private industry should do most of the job, providing longer mortgage terms and lower monthly payments. The union advocates machinery, such as a builder's deposit, to guarantee quality to the home buyer.

Eye on the Future

Kaiser, looking ahead to completion of war shipbuilding program, sews up contract with the Dutch for cargo ships.

Shipbuilder Henry J. Kaiser knows that by the end of 1944 the United Nations will have amassed vast quantities of cargo ships, and that some shipbuilders may then be twiddling their thumbs.

Last week the shipbuilder announced that the U. S.-owned Kaiser yard No. 4 in Richmond, Calif., will build 30 coastwise cargo vessels for the Netherlands East Indies government.

● **In Design Stage**—So far, however, the deal consists only of a contract for designing the small vessels—and a good deal of optimism.

Building will commence (1) after designs and cost estimates are approved, (2) after materials become available from WPB, (3) after high-priority war contracts have been filled by the yard, and (4) if manpower is available.

● **Approved by WPB**—The signing of a shipbuilding contract with a non-Washington buyer is a notable event in the life of a government-owned plant. Conceivably other governments, even a few private industries, will begin putting postwar plans on paper in this manner.

The Kaiser contract has Maritime Commission approval and, with the full understanding that its completion will not be permitted to interfere in any way with U. S. war contracts, the tacit approval of other high agency officials in Washington—including Chairman Donald Nelson and Vice-Chairman Charles E. Wilson of WPB.



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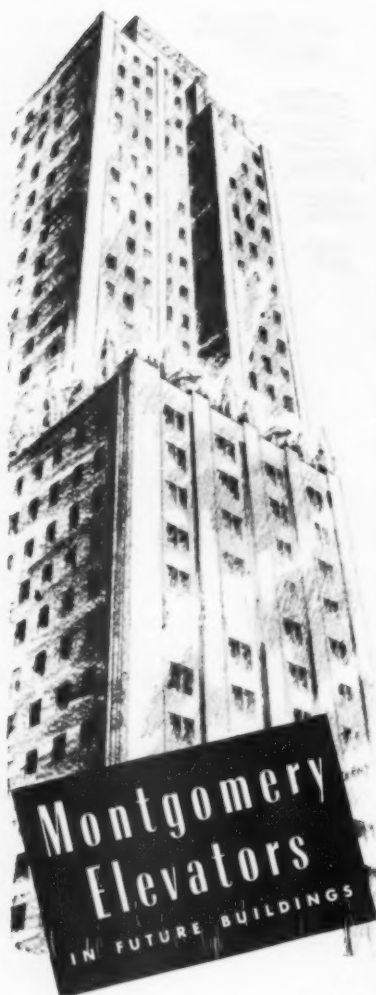
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MONTREAL



NEW BUILDINGS now being planned will utilize new materials and techniques. And where passenger and freight elevators are required, new problems will arise. For assistance in solving these problems you can depend on Montgomery. For nearly 50 years Montgomery Elevators have been giving dependable service in thousands of buildings throughout the country. Accurate records show that practically no major repairs have ever been required. Too, original cost of Montgomery Elevators is generally lower than that of other comparable makes. If you are planning a specific project, we invite your elevator problems.

MONTGOMERY MANUFACTURES a complete line of passenger and freight elevators, electric dumbwaiters and special equipment for vertical transportation.



HOME OFFICE - Moline, Illinois
Branch Offices and Agents in Principal Cities

Ickes Oils Guns

Ammunition is a preliminary report on Middle East petroleum to back up his fight for pipeline from Saudi Arabian fields.

The ammunition which Interior Secretary Harold L. Ickes, Petroleum Administrator for War, will pass along to Congress in the hope of blasting away all opposition to a strong, acquisitive oil policy in the Middle East (BW-Mar. 11 '44, p. 22) is now in the status of final assembly.

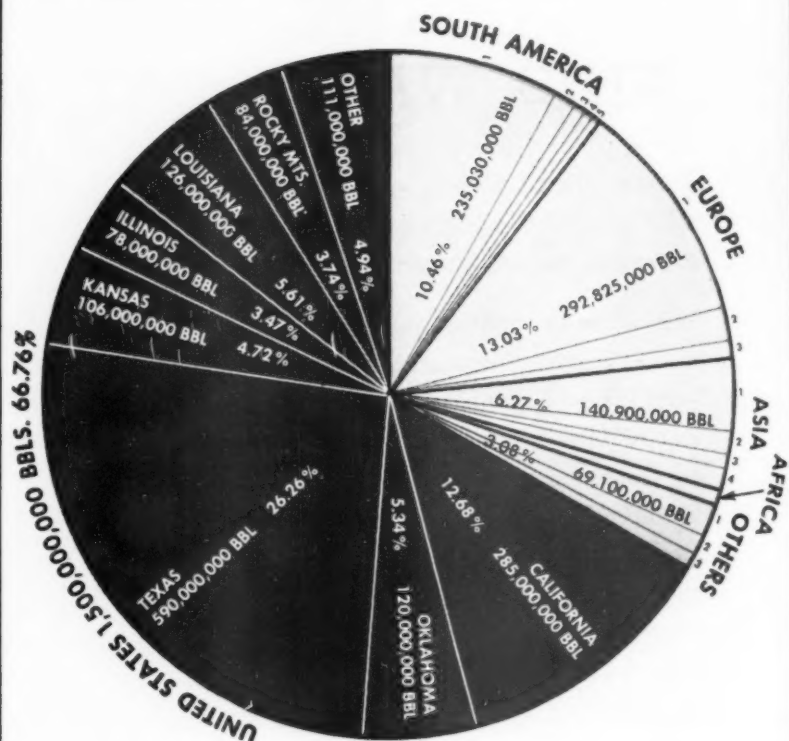
A preview of its content and caliber

appeared last week in the preliminary report of a technical mission Ickes sent to the Middle East.

E. L. DeGolyer, widely known geologist and chief of the mission, asserted bluntly that the principal center of world oil production has begun to move from the Gulf of Mexico to the Persian Gulf.

● **Middle East Reserves**—Although the present level of Middle East oil production looks small compared with that of the United States (chart), DeGolyer said the proved and indicated reserves of the Persian Gulf area "are comparable with those of the United States [that is, some 20,000,000,000 bbl.], yet all of the Middle East reserves have been discovered by the drilling of less than

WORLD PETROLEUM PRODUCTION—1943

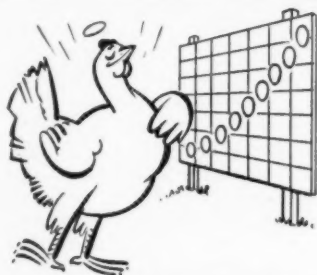


UNITED STATES		
Total	1,500,000,000	66.76
SOUTH AMERICA		
1 Venezuela	182,550,000	8.12
2 Argentina	24,400,000	1.09
3 Peru	14,500,000	0.65
4 Colombia	10,580,000	0.47
5 Other	3,000,000	0.13
EUROPE		
1 U. S. S. R.	240,000,000	10.68
2 Rumania	36,500,000	1.62
3 Other	16,325,000	0.13

ASIA		
1 Iran	78,000,000	3.47
2 Iraq	25,350,000	1.13
3 Bahreine		
4 Saudi Arabia	12,750,000	0.57
Other	24,800,000	1.10
AFRICA		
Egypt	9,100,000	0.40
OTHERS		
1 Mexico	37,000,000	1.65
2 Trinidad	22,000,000	0.98
3 Canada	10,100,000	0.45

Data: World Petroleum

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*When a hen triples production That's **NEWS!***

SOME YEARS AGO, the average American hen laid about 65 eggs a year. Today, in flocks properly fed with high protein poultry feeds, she lays 180 to 200 eggs a year. Multiply that by millions of hens... and figure what that means to the price you pay for eggs, to the nourishment and health of your family and, yes, to the winning of the war.

Consider meat and dairy products, too. Experts say both would be cut probably in half if high protein concentrates, developed through years of research by feed manufacturers, weren't available to supplement grazing, hay and grain feeding.

The 11 million tons of special poultry and livestock feeds produced in this country literally multiply the value of the 115 million tons of feed grains grown on American farms.

Feed producers will tell you that bags... burlap, cotton and paper bags such as Bemis

makes... are the only practical containers to carry this huge volume of feed to local dealers and on to the farms. In truth, without these bags the feed industry, the livestock and poultry industries, would be tragically crippled. And nearly all of the principal feed producers depend widely, as they have for scores of years, on Bemis Bags.

An executive of a leading feed mill put it this way: "Bemis Bags are important conveyors on the production line for the food that sustains America."

★ ★ ★

Bemis makes cotton, burlap and paper shipping bags of almost limitless types and sizes for scores of different uses... and new uses are developing constantly. Almost everything you eat, wear or use may make at least part of its trip to you in a Bemis Bag.

BEMIS BRO. BAG CO.

GENERAL OFFICES: ST. LOUIS



Cotton, Burlap and Paper
Shipping Containers

23 PLANTS THROUGHOUT THE COUNTRY

INVEST TODAY IN WAR BONDS



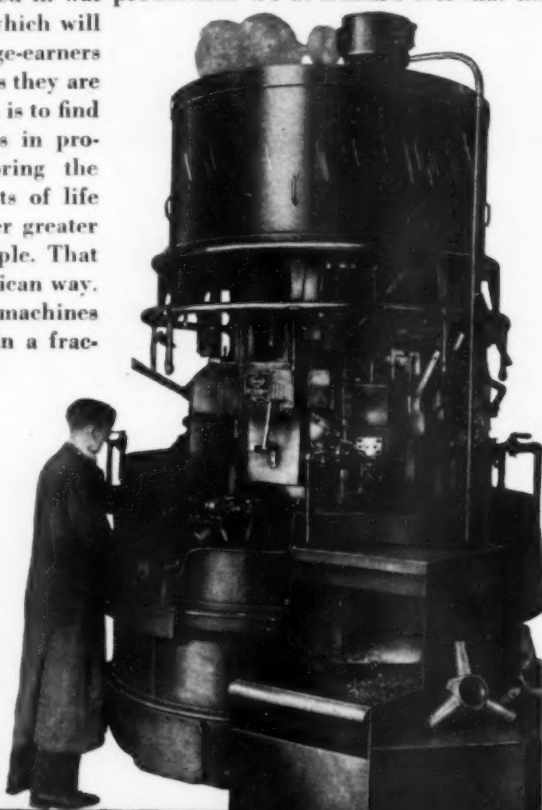
Convert ALL Swords TO PLOWSHARES ?

America's production in 1943 was 184 billion dollars. In 1939 it was 92 billion dollars (approximately).

How can this country convert all of its increased plant facilities so that they may be utilized in time of peace? If we do not by accurate planning find the right answer to this question, we shall win the war but lose the goal for which we are fighting.

Winning the war at the earliest possible date comes first, of course. All the thousands of Bullard machines we have produced in the last three years are busily engaged in war production. We at Bullard feel that the only possible answer which will employ America's wage-earners in peace-time as fully as they are now employed for war, is to find ever greater economies in production which can bring the necessities and comforts of life within reach of an ever greater proportion of our people. That is the traditional American way. The present Bullard machines are doing many jobs in a fraction of their former time and cost. We pledge our continued efforts towards even greater savings, in the interests of a quicker victory and a better peace.

Bullard Multi-Au-Matic machining propeller hub spider in a large Eastern plant. Time for the operation is 18 min. 5 sec. as compared to former time of 5 1/4 hours by another method.



THE BULLARD COMPANY
BRIDGEPORT 2, CONNECTICUT

150 wildcat wells." In the United States, more than 20 times this number of wildcat wells are drilled each year.

DeGolyer also reported that Middle East productive capacity in the next ten to 15 years is likely to be four or five times its probable market outlet.

• **Construction Deferred**—Acknowledging the highly speculative nature of such appraisals, he ranked Iran and Saudi Arabia as contenders for first place in value of undrilled reserves: "Iraq ranks close third with Qatar a somewhat distant fourth, and Kuwait a definitely distant fifth." Qatar is a peninsula jutting out of the Arabian mainland midway up the Persian Gulf western coast. Kuwait is at the northern end of the gulf, just south of Iraq.

A special U. S. Senate committee expects to begin hearings on national oil policies within the next few weeks. Ickes, meanwhile, agreed to withhold actual construction of the Arabian pipeline project until Congress has had an opportunity to speak its mind on the subject.

Family Survey

Unique analysis is made as basis for scientific planning of homes, but the data may prove valuable to many industries.

A unique analysis of family habits and behavior has just been released by the John B. Pierce Foundation, New York. This is a nonprofit research organization which has contributed outstanding designs to the prefabricated housing industry (BW—Apr. 13 '40, p. 24).

• **Scientific Planning**—Object of the foundation's new study (Family Behavior, Attitudes, and Possessions) is the presentation of material which can be used as a basis for scientific planning of homes.

But much of the information will be of interest to other industries, such as manufacturers of clothing and household furnishings. The survey found, for example, that in summer 70.3% of the wives sleep in nightgowns, 24% in pajamas, 5% in the nude, 0.7% in shorts. Sixteen women reported that they would like to sleep in the nude. "Here," notes the report, "we have clear-cut evidence of an inhibition." The survey also tabulates the quantity and type of other clothing the family uses, points out that there is little difference in amount of clothing owned by high- and low-income families.

• **Aid to Designers**—Furniture manufacturers and designers will find another section of the survey valuable. A special appendix of the study reveals that 87%

The test of a dog whistle...



Once there was a man who wanted a super-sonic dog whistle—the kind dogs can hear, but people can't. Being a cautious buyer, however, he wanted proof it would work. The salesman was stumped, but not for long. He went to the door and blew the whistle. It made no sound. But down the street a dog's eager ears came to attention, and up he bounded, tail wagging furiously. He had heard this sound through every other sound about him.

*For getting attention—and
for getting it fast—there's
no more effective method
known than the use of sound.*

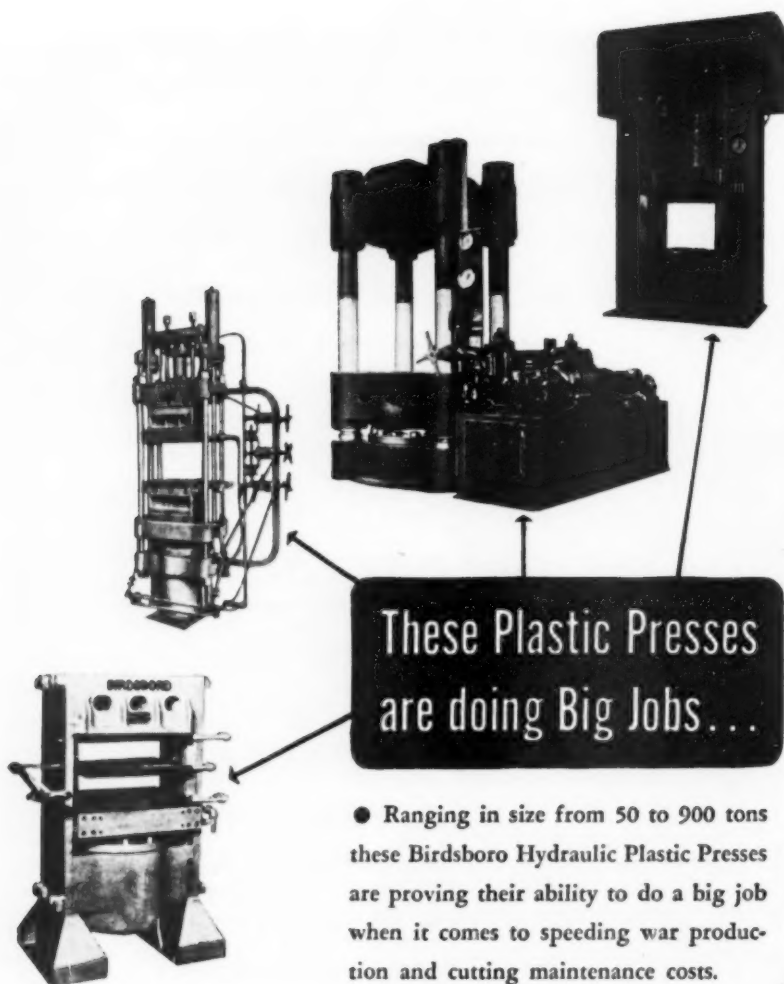
That's why sound systems are virtually indispensable in war plants today. They not only help locate key men in a flash, but they help relieve congested telephone lines, and promote safety in emergencies. And a sound system often pays for itself in an amazingly short time through the saving in man-hours alone!

Stromberg-Carlson offers its facilities and experience to help you get the most out of a sound system. Call on us, or write for Booklet No. 51. Sound Equipment Division of the Stromberg-Carlson Company, 100 Carlson Road, Rochester 3, New York.

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HYDRAULIC PLASTIC PRESSES

of husbands and wives sleep together in double beds. Only 5% of wives are dissatisfied with this, but 40% think maybe twin beds would be ideal.

The plumbing industry will be especially interested in the analysis of bathroom habits.

● **Basins Too Small**—A majority of apartment dwellers consider wash basins too small and 18% consider them too long. Grab rails (to aid in getting in and out of bath tubs) are wanted by 84% of those who don't have them. The majority of housewives reported toilet seats satisfactory as to size and shape.

In commenting on this effort to substitute scientific bases for the traditional trial and error method of home planning, Robert L. Davison, Pierce Foundation's director of research, asserts that the result should be dwellings as radically different from present-day housing as the automobile was from the horse and buggy.

● **Careful Selection**—Great care was taken in the selection of families and in the training of interviewers. The study included 65 families living in apartments in limited-dividend housing developments and 66 families living in houses. Income of the first group ranged from \$2,000 to \$3,000 annually, that of the second group from \$3,000 to \$4,500. Complete cooperation of the subject families was obtained by careful preliminaries, and each family was given \$5 in war stamps at the termination of the study.

The foundation believes that it is presenting much family information for the first time. Such probably is the case, since the interviewers delved into intimate details of family relations.

● **Bedroom Habits**—Thus it is noted that the average husband gets into bed and turns out the light later than the average wife, that he gets up earlier in the morning. But she spends only 15 minutes before falling asleep, which is less time than needed by her husband.

Fifty percent of the husbands report no activity after getting into bed, 22% read, 12% talk, 7% listen to the radio, 3% say their prayers, 2% smoke, 2% eat. Comparable percentages for wives were: 40% no activity, 29% read, 11% talk, 8% listen to radio, 5% say their prayers, 3% think, 2% smoke, 1% eat. Twenty-six wives reported that their husbands had awakened them in the night during the week of the survey. Eight said this was on purpose, the rest that it was accidental.

● **Data on Dressing**—There is indication of a taboo in the data concerning the presence of other family members during the operation of dressing or undressing. Some 63% of the wives reported that their husbands were present when they dressed and 72% said husband

Purchase Order, Receiving and Inspection Records

...all from a single writing

Here's a sound and simple system of purchase order control that is proving itself in large and small plants throughout the country.

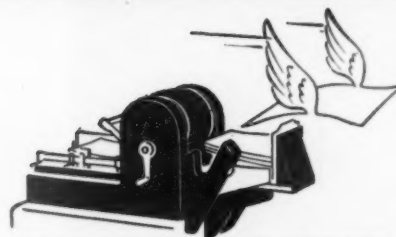
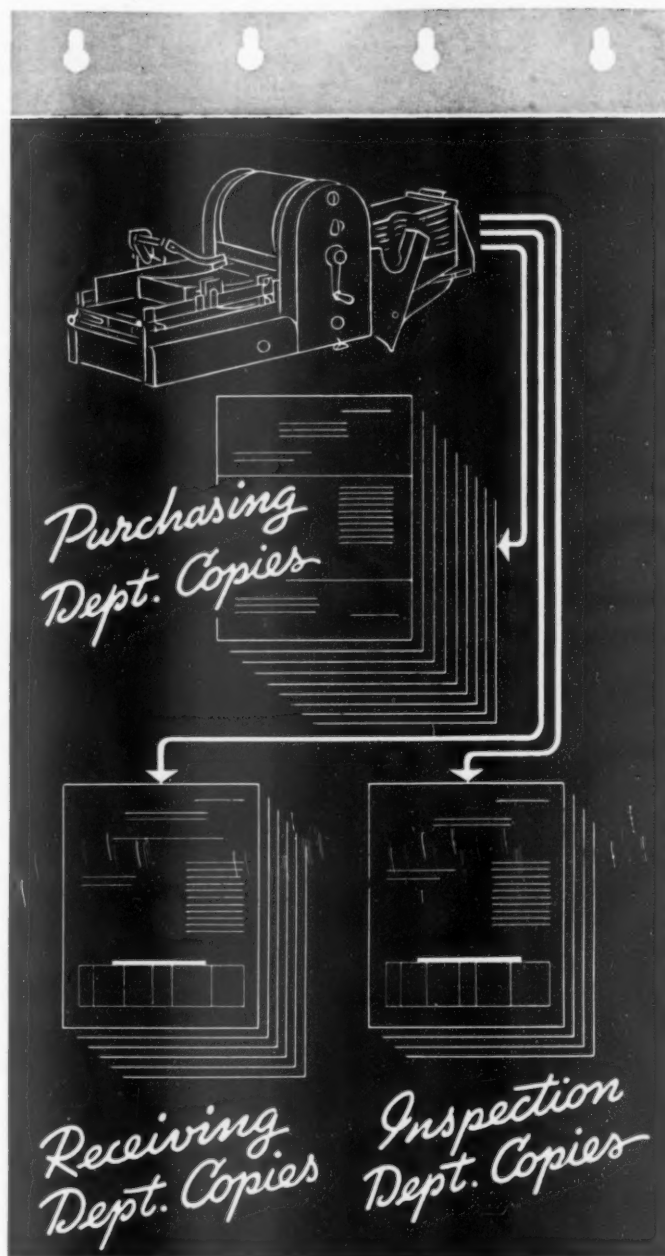
It eliminates wasteful rewriting and makes possible sure, accurate control from start of the order until the stock reaches the bins.

A single writing on a Mimeograph form-topped stencil sheet produces, on the Mimeograph duplicator, a combination purchase order with receiving and inspection forms—in sufficient quantities to go to everyone concerned.

Thus, everyone who needs to know has this information at his fingertips: when material is ordered, what is ordered, what is received, what is accepted, what is in the stock bins. A. B. DICK COMPANY, Chicago.

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If you buy finished or semifinished parts and raw material, don't miss getting full information on this practical and efficient new system. You'll find complete details in our new folder, "Complete and Accurate Control over Purchased Parts and Raw Materials." Send for your copy today. The coupon at right is for your convenience.



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KEEPS THE
AIR LINES FREE
FROM DUST
AT BAKELITE'S
PLANT

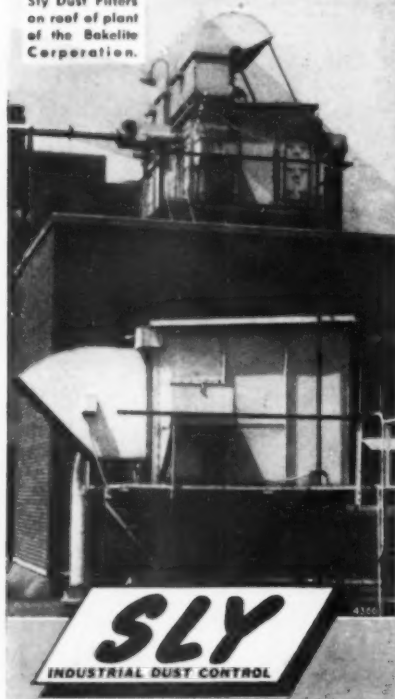
SHOWN below are two of the four Sly Dust Filters on roof of the Bakelite Corporation plant—two on the penthouse and one at each end.

Dust-laden air, created in manufacturing operations, is drawn through ducts into these filters and all dust is removed, keeping the plant clean and providing healthful working conditions for employees.

More and more plants are installing Sly Dust Control. It is not expensive, costs little to operate and pays big returns in quality of product and character of workmanship due to improved working conditions. Ask for Bulletin 98 and tell us your problem. Our engineers will help you solve it.

THE W. W. SLY MFG. CO.
4749 TRAIN AVENUE
CLEVELAND 2, O.

Sly Dust Filters
on roof of plant
of the Bakelite
Corporation.



CHILDREN'S DEPOT

Tiny travelers take time out between trains in the new Pennsylvania R. R. nursery at Philadelphia's 30th St. Station. At this three-room center equipped with cribs, books, toys, and other small-fry gadgets, mothers may

park their offspring gratis while making travel arrangements or awaiting trains. Open daily from 7:30 a.m. until midnight, the nursery caters to tots up to six years old and features such attractions as a trained nurse, refrigeration for infant formulas, and emergency diaper supplies.

were present when they undressed.

Of equal interest is the table showing where women put on or remove particular items of clothing. As could be expected, most of them dress and undress in the bedroom or bathroom. But four reported that they put on stockings, two that they put on brassieres, one that she put on panties in the kitchen or other room.

• **Data for Architects**—Actually, the survey has much factual information that should serve as a guide to home designers. For example, 63% of the women and 48% of the men reported that they didn't have sufficient closet space. The survey has studies of the amount of clothing the average person owns, providing a statistical basis for planning the size of a closet and designing its facilities.

Another note of interest to home planners: Most women interviewed in the survey reported they prefer large kitchens even though they may not be as convenient as smaller ones. In general, women called for larger rooms, recreation rooms, stall showers, and extra bathrooms.

DIESEL PLANS STUDIED

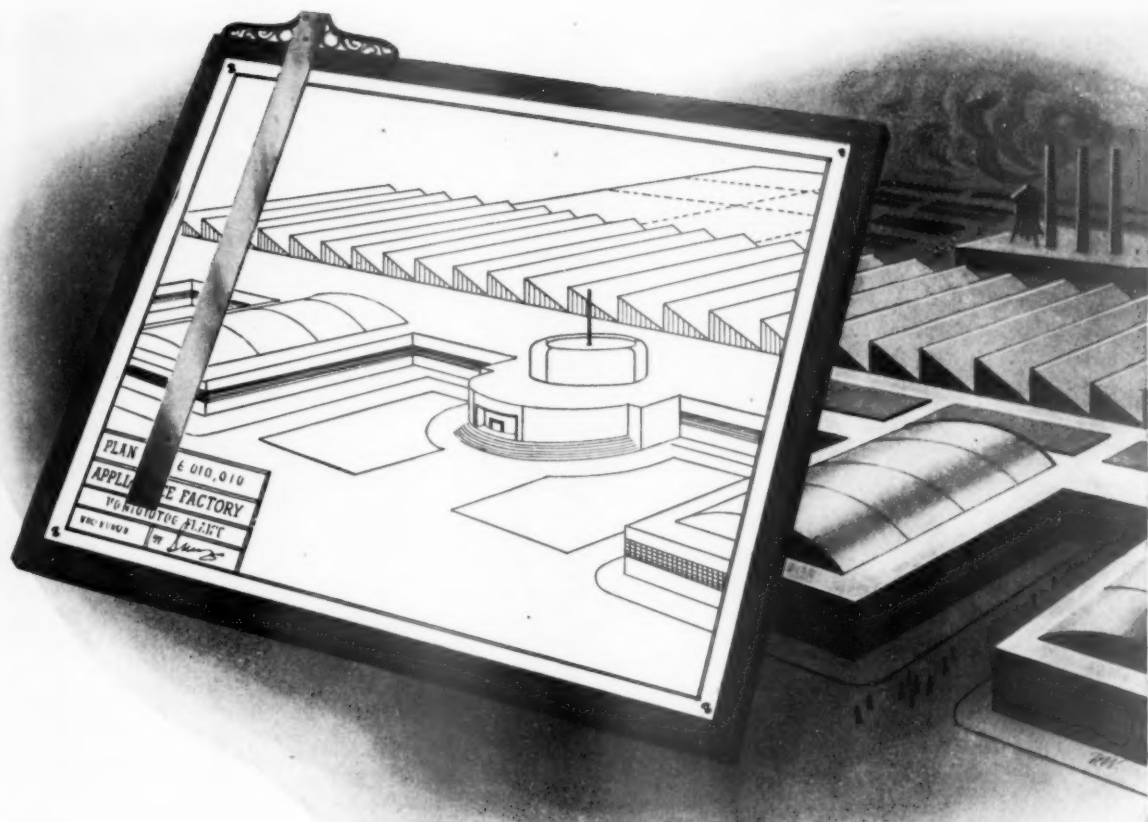
Fairbanks, Morse & Co. makes no secret that it has been studying the diesel-electric locomotive as a major

possibility for postwar volume, and that it has under construction a 1,000-hp. switcher for the Chicago, Milwaukee, St. Paul & Pacific Railroad.

But the management feels that reports which have it going ahead full-blast in the diesel-electric locomotive business, are premature, and the concern insists that a final decision on this point has not yet been reached.

Actually, railroad locomotive diesels would be no brand-new enterprise for this company. In the late thirties, Fairbanks, Morse developed a lightweight opposed-piston type diesel which was expected to make good in line-haul locomotives. The first of these engines were sold for some lightweight two-car electric-drive trains which St. Louis Car & Foundry Co. built for the Southern Railway. These trains have been in continuous service ever since.

But before Fairbanks, Morse could follow up this start in the railway field, the U. S. Navy sized up the new diesel as ideal for submarines, and ever since has taken Fairbanks, Morse's entire output. Other diesel manufacturers have taken it for granted that Fairbanks, Morse would return to the railroad locomotive market after the war, as a promising big-volume outlet for the greatly increased capacity of its Beloit (Wis.) works.



Your Post-War Competitive Position *is on Engineers' Drawing Boards* **TODAY**

Today, many an industry is wisely planning its competitive peacetime manufacturing facilities. Undoubtedly you're doing it too—or expect to.

Air Conditioning is a vital part of such plans—for its war-proved benefits of better precision control and higher worker efficiency.

In the post-war world, competition will be keener than ever. Every factor which improves product and lowers cost will be employed. Modern Air Conditioning is one of these.

Modern Air Conditioning means Westinghouse—and its years of pioneering research and engineering experience.

For essential war uses in factories, hospitals, airports, military bases, etc., Westinghouse Air Conditioning and Industrial Refrigeration Equipment is available today.

For executives, architects and engineers now planning post-war reconversion and modernizing, dependable data and competent application engineering assistance are ready.

Phone your nearest Westinghouse office, or write on your letterhead to Westinghouse Electric Elevator Company, 150 Pacific Avenue, Jersey City 4, New Jersey.

HERMETICALLY-SEALED FOR DEPENDABILITY

Westinghouse pioneered the Hermetically-Sealed Compressor. Hermetically-sealed means light weight • small size • low maintenance and operating costs • high efficiency • long life.

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Air Conditioning





Lift FOR BETTER LIVING

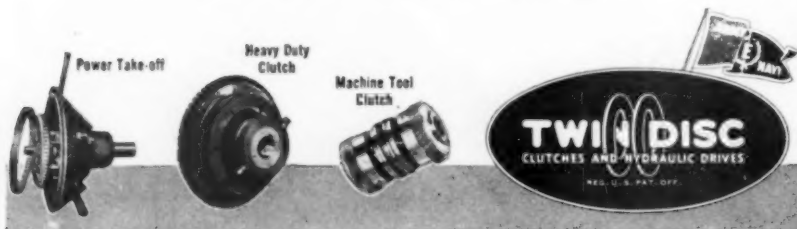
Even legendary magicians would have been hard pressed to match the feats possible with modern cranes. The swinging arms of these mechanical giants have freed men forever from the back-breaking drudgery of lifting heavy loads. Without cranes to do big jobs better and faster, all heavy goods produced for man's comfort, protection and convenience would cost each of us much more in both money and labor.

Like industrial machinery in numerous other fields, many cranes have their power applied and controlled through Twin Disc Hydraulic Torque Converters. The Twin Disc Clutch Company brings more than 26 years of industrial clutch-building experience to jobs like

giving these giants smooth muscles. Industrial machines of all types operate more smoothly, economically and efficiently when the in-built stamina and reliability of Twin Disc power links are added to their other characteristics.

Besides hydraulic drives, the Twin Disc Clutch Company produces a complete line of friction clutches for practically every industrial application. Consequently, you can obtain here the kind of unbiased clutch counsel that considers the needs of your equipment first. Application data, specifications or any other details about Twin Disc products to help with your present problems or future plans may be had for the asking. TWIN DISC CLUTCH COMPANY, Racine, Wisconsin, (Hydraulic Division, Rockford, Illinois).

The New Hydraulic Torque Converter (Lysholm-Smith Type). Also available with integral clutch, and either model may be had for direct connection of output shaft.



Bonneville Grab

Public utility districts and power administrator renew campaign to buy Puget Sound electric distribution systems.

Lacking both adequate authority and funds to acquire the distribution systems of private utilities, Bonneville Power Administration is spawning a variety of circuitous plans for the acquisition by other public power agencies in the Pacific Northwest of the major lines needed to distribute Bonneville and Grand Coulee juice in large centers of population, such as Seattle.

• **First Idea Rejected**—Large private utilities in the Northwest have been unwilling to sell their plants piecemeal to separate public utility districts, which, individually, often cover only a part of the far-flung private systems.

The first idea (BW—Dec. 4'43, p. 105) was to set up the Hood River County Public Utility District, organized under Oregon state law, as a public power holding company to buy up utilities on a wholesale basis and operate them or dispose of them piecemeal to other PUDs or municipalities. But, in January, voters of the Hood River County PUD refused, by a vote of 865 to 522, to authorize the \$175,000,000 bond issue needed to turn the trick.

• **New Proposal**—Undismayed, the Bonneville Administration has now come up with another idea. Together with other public power agencies in the state of Washington, it has proposed buying the Puget Sound Power & Light Co. for \$90,000,000.

The offer can hardly be called a solid one, however, for even if the company accepted the proposal, voters in a score of counties would have to approve purchase of the revenue bonds and then Congress would still have to put its O.K. on the deal. Frank McLaughlin, president of Puget Sound Power & Light, said the offer appears to be "a mere exploration of the receptivity of the company to a firm bid when and if one can be procured."

• **Referendum Pending**—As chances of consummating the deal are remote, the proposal is widely regarded as a maneuver to influence votes next November, when Washington voters will have a power referendum on the ballot.

The proposal would empower Washington public utility commissions to form joint, overriding power authorities to purchase and finance joint public power developments and purchases.

Foes of the proposal charge that it would remove from the voters in power



Bigness is as Bigness does

NOT so long ago it seemed politically popular to smear bigness in business as unserviceable and something to be penalized.

Then came the war. Remembering the desperate need we had for weapons with which to fight for our country's life, do you think now that any of our businesses were too big?

Looking beyond war, and to the piled-up needs of the world and ourselves for more and better things, do you think that any of our businesses will be too big for that?

And seeing, as our destiny, the greatest and most prosperous era for our people that this earth has ever known if we will but earn it, do you think our businesses are, not too big, but big enough?

Bigness is as bigness does, in a business as in a nation or in a man. And we must not forget that in America,

most of our big businesses are big because our people made them so.

They bought the goods that offered the value; the more they bought the more the values grew; they rewarded and made biggest the businesses that gave them most for their money in products and service.

Hearst Newspapers are for bigness, for bigger businesses for everybody, knowing that any time a business gets too big to better its values, the people soon cut it down to their measure by turning to a competitor.

Hearst Newspapers are for bigness, because they are big themselves, and know whereof that bigness springs. It springs from doing a big and needed job in a big and useful way, and if you don't keep on doing it that way you needn't worry about bigness, but the contrary.

For a long time now, in more than

a dozen of the great key cities in America, Hearst Newspapers have served the nearly 5,000,000 families that read them in the biggest way they know how. With this result:

If it is on-the-minute, accurate news they want, they look to Hearst Newspapers first.

If it is authentic interpretation of events or trustworthy editorial counsel they want, they look to Hearst Newspapers first.

If it is features, newspaper pictures, cartoons, columnists' comment, society, sports or business news they want, they look to Hearst Newspapers first.

There is a lesson here which no sensible advertiser with an eye on the future will ignore.

It is simply that in planning marketing programs to reach these people, he should look to Hearst Newspapers first, as do they.

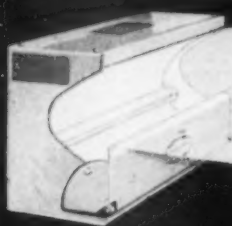
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BALTIMORE NEWS-POST Evening	LOS ANGELES EXAMINER Morning and Sunday	OAKLAND POST-ENQUIRER Evening	SAN FRANCISCO EXAMINER Morning and Sunday
BOSTON ADVERTISER Sunday	LOS ANGELES HERALD-EXPRESS Evening	PITTSBURGH SUN-TELEGRAPH Evening and Sunday	SEATTLE POST-INTELLIGENCER Morning and Sunday
BOSTON RECORD AND AMERICAN Morning and Evening	MILWAUKEE SENTINEL Morning and Sunday		

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**THE ZONE OF PROTECTION
AGAINST
AIR-BORNE GERM INFECTION**



Absenteeism, due to illness caused by air-borne bacteria, disrupts worker efficiency, lowers plant production, and costs America millions of dollars every year.

NOW YOU CAN DO SOMETHING ABOUT IT—

Wherever people work together you can easily provide a zone of protection through which convected air currents carry disease germs to their death.

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Reg. U. S. Pat. Off.

ULTRAVIOLET GERMICIDAL RADIATION SYSTEM

is a scientific combination of a powerful germicidal tube in a patented reflector-fixture that is easily installed on any wall above eye level. HYGEAIRE radiant energy will rapidly destroy in excess of 85% of all infectious air-borne bacteria and viruses—but, when properly installed, is entirely harmless to room occupants. Its life is long, tube renewal is easy and inexpensive, and operating cost is only a few cents a day.

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Offices in all principal cities.

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World's Largest Producer of Hospital and Clinical Sterilizers

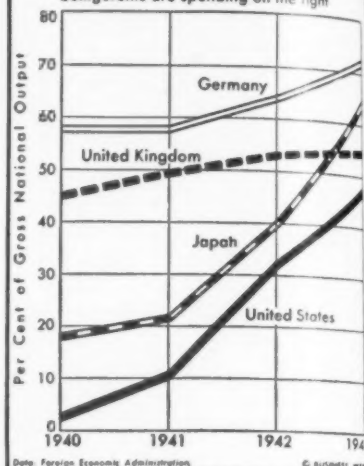
Use HYGEAIRE Wherever People Congregate

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Packing Plants
Passenger Coaches
Pullmans
Purchasing Offices
Radio Studios
Reception Rooms
Restaurants
Sanatoriums
School Rooms
Tool Rooms
Waiting Rooms
Wash Rooms



HOW HARD A WAR?

Per cent of gross national output which major belligerents are spending on the fight



It is impossible to measure accurately what proportion of its total output any nation is putting into the war. But available data do indicate general relationships. Germany's proportion is especially high because it is draining occupied lands for the Wehrmacht. Japan's ratio reflects its low standard of living. Britain, of course, imports many basic foods and other materials which it therefore need not produce.

districts all control over such authorities and that such authorities would become power bureaucracies themselves.

● **Financial Plan**—According to Paul J. Raver, Bonneville administrator, the \$90,000,000 offered for Puget Sound Power & Light is enough to retire all the company's bonds at their call price and to pay off the common stock at its par value of \$19.

The proposal would take over all pension and insurance plans now in effect, and a union committee would deal with questions of employment status.

According to Raver, 16 of the 19 counties served by the system would buy revenue bonds, the other three—King County outside Seattle, and Pierce and Island counties—would handle the purchase through an interim corporation.

Paul B. McKee, president of the Pacific Power & Light Co., which was involved in the Hood River purchase project, termed Bonneville's new offer "just another propaganda effort on the part of the power socialists who want all electric service in the Pacific Northwest to be controlled by a bureaucratic monopoly."

Gold Mined Again

WPB lifts bars on two California operators for limited production to meet maintenance costs in damaged drifts.

Initiating measures to preserve valuable sections of the nation's gold mining properties threatened with extensive damages or losses because of wartime restrictions, the War Production Board's Mining Division has granted permission to two of California's gold producers to resume limited mining operations to meet maintenance costs.

• **Damage From Cave-Ins**—The properties which will be permitted to operate on a restricted scale are the Idaho, Brunswick, and New Brunswick mines of Idaho Maryland Mines, Inc., and the Empire and North Star mines controlled by Neumont Mining Co. All of the mines are rich producers and are located in the Grass Valley-Nevada City area.

The operating companies were allowed to resume work on their showing that mine drifts were rapidly being filled by cave-ins caused by the collapse of overhead beams and heavy side timbers which had been weakened by fungus. Financial loss suffered by the mining companies through the necessity of their maintaining skeleton maintenance crews during the shutdown period was another item considered by WPB.

• **Little Maintenance**—Indicative of the losses taken by these and other compa-



Collapsed timbers deep inside one of the Idaho Maryland, Inc., gold mines in California illustrate how the workings depreciate during wartime idleness. Because of this, WPB is easing some of its gold mining restrictions.



CHAIN—for every Essential Need

International makes chain for every essential need—industrial, marine, farm, automotive. And International's manufacturing and service facilities are complete in every detail.

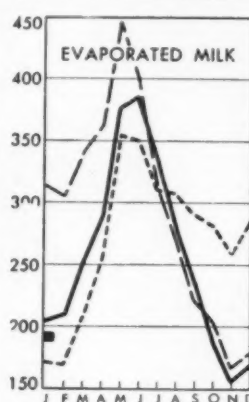
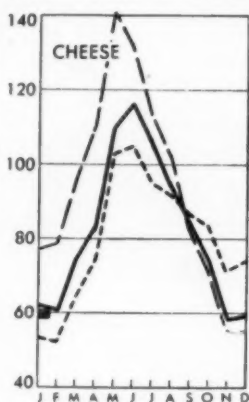
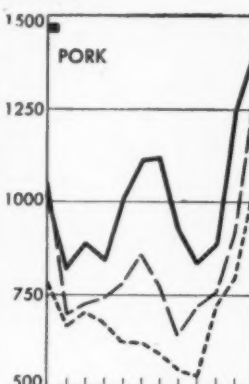
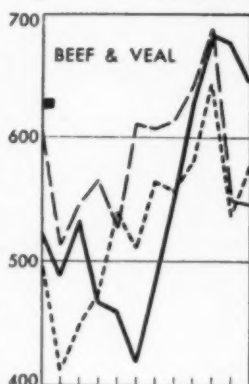
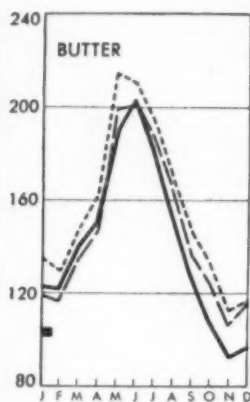
INTERNATIONAL CHAIN & MFG. CO.
YORK PENNA.

The
CAMPBELL
Line

FOOD FIGURES: MEAT UP, DAIRY PRODUCTS DOWN

Thousands of Pounds

When feed is scarce, there is always a sharp rise in livestock slaughtering. There is also a drop in milk production, and farmers are likely to sell such milk as they have in fluid form, rather than for butter, cheese, or canned milk, because they get more for it. With feed tighter than ever this past winter, that's exactly what has happened. These factors affect military and lend-lease allocations, as well as civilian supplies.



Data Dept. of Commerce

--- 1941 — 1942
— 1943 ■ 1944

© BUSINESS WEEK

nies were the figures submitted by the Idaho Maryland operators. With gold selling to the government at \$35 an ounce, the company's output in 1940 was \$4,712,506.87, less mint charges. Its 1941 production, less mint charges, was \$4,086,084.27.

On Oct. 8, 1942, WPB issued an order which stopped production entirely (BW—Oct. 17 '42, p. 32) but permitted milling of accumulated ores over a limited period. The financial repercussion on the mine operators is indicated by the annual report of Idaho Maryland Mines, Inc., which showed the company took a loss of \$341,000 on maintenance costs alone, and that even such expenditures did not suffice to prevent serious damages to the mine drifts.

• **Retain Tight Control**—In acting to "provide relief from unwarranted hardships on California's gold mining industry," WPB made it plain, however, that it was not letting down the bars indiscriminately. The appeal to operate was granted under conditions which will not interfere with military or essential war and civilian production.

Manpower and critical equipment will be made available to the mines under

joint WPB and War Manpower Commission agreement and all maintenance workers and miners will be employed through the United States Employment Service.

WPB further stressed that such grants will be made only in special cases wherein the need for assistance to prevent further damage to properties of proved production and economic value to the region is clearly shown.

TRAVELERS GET BREAK

Eastern railroads moved this week to give the public a better chance of obtaining advance travel accommodations.

Last fall, in order to stop the tying up of space many months in advance, the roads announced that they would not make train reservations earlier than 30 days before the date of departure.

Under this rule, railroads open train diagrams today for departures a month from today; tomorrow they will open diagrams for departures a month from tomorrow.

But many a prospective traveler, rising early to be first in line at a ticket office, found that his train leaving a month

hence already was sold out. The reason was that the time for opening diagrams varied widely on individual railroads—on some it was the small hours of the morning. Reservations sold in the early morning hours, plus requirements for military and other government travelers, often absorbed all available accommodations by the time the average traveler reached the ticket window.

Eastern railroads have agreed that after Apr. 1 reservations made under the 30-day rule cannot be made before 10 a.m. Western roads are expected to follow suit by fixing a uniform hour.

Army Steps Out

With peak of training past, Air Forces are giving up Miami Beach hotels. The owners are glad, but apprehensive.

Amid mutual expressions of disesteem, the Army Air Forces are preparing to turn back those Miami Beach hotels to civilian operation and use.

• **Bad Feelings Stirred**—The move comes at the climax of a winter season which engendered much bad blood between service men and their families on one side, and a splurge of war-fat tourists on the other (BW—Feb. 5 '44, p. 36).

Army men complained that they were outrageously gouged on prices, that tourists seemed to resent the uniforms, that there were protests from late-sleeping civilians against the soldiers' singing as they marched to early morning exercises.

• **Year-Round Patrons**—While resort operators will welcome the return of their properties at a time when indications point to a continued avalanche of civilian patronage, they may have slight misgivings. The soldiers and their wives were year-round customers, spending freely summer and winter. Return of the hotels will come during the summer, may make a considerable dent in midyear receipts.

Announcement of the Air Forces' withdrawal was made early last week. Transfer of all air training activities to San Antonio, Tex., will begin Apr. 15. A number of hotels already have been returned to their owners. The new move will release 139 hotels to civilians by July 1, and more later.

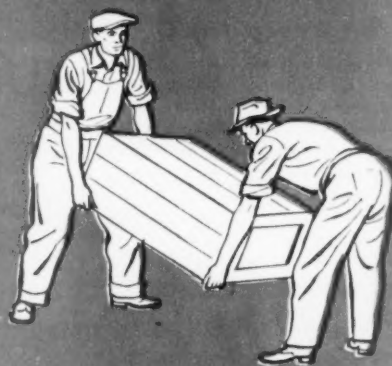
• **Convalescents to Remain**—However, the stucco paradise will not lose all its khaki customers. The Air Transport Command will remain, and the palm-bordered beaches still will be available to airmen for rest, rehabilitation, and convalescence.

The Air Forces invaded Miami Beach

ONE MAN

DOES MORE

THAN 3 OR 4



THAT'S the way you save manpower with a Barrett Portable Elevator—a saving that's doubly important today

You can ease the manpower shortage in your plant with Barrett Portable Elevators and release men for productive work. One man with a Barrett does more than 3 or 4 with ordinary equipment.

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creasing storage space 200% and 300%—oftentimes more.

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A post card is the easy way to get your free copy of the Barrett Junior Catalog.

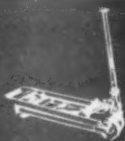


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DOLLY SYSTEMS



PORTABLE ELEVATORS



STEEL STORAGE RACKS



FULL "PAY LOAD" on every trip!

See how easy it is for one man and a lift truck to handle 15 loaded Lewis Stacking Boxes on a skid. Multiple handling saves time — increases efficiency and saves valuable floor space. Lewis Boxes are sturdily constructed with "flexible strength" that enables them to stand up year after year under hard usage.

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**MARSH STENCIL
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Millions in shipments are lost due to poor marking. Stencil-Marked addresses assure prompt delivery. Unlike tags and labels they can't come off, regardless of weather or handling. Cut your own stencils with a Marsh Machine. Save up to \$600 annually. Three sizes to meet Gov't Spec., 1", 3/4", 1/2". Write for FREE booklet, prices.



MARSH

in January, 1942, after Pearl Harbor. Thousands of student bombardiers and pilots arrived with a speed that did not allow for building of necessary quarters. Luxury hotels were taken over. Youngsters getting their \$50 a month lived during instruction in rooms which cost winter tourists half that much a day during "the season."

• **Overflow Stemmed**—Surrender of the hotels becomes possible with completion of the training program to the point where thousands are ripe for battle duty and the remaining trainees can be absorbed by regular instruction centers. The 20,000 officers and men now studying at Miami Beach will complete their courses before the migration to Texas.

Used Car Genius

Conservative Earl Muntz of Los Angeles sells by radio advertising campaign as West Coast "automotive madman."

Los Angeles has produced a wartime phenomenon—Earl Muntz, who has become in two years one of, if not the biggest, used car dealer in the United States.

Muntz, as the genius of blarney and bigtime promotion, may be heard on West Coast air waves where spot radio announcements in ingenious variety have grated upon the ears and ruffled the tempers of listeners since Muntz got into the used car business.

• **Biggest Advertiser**—Muntz may be seen, in foolish caricature, on the billboards of Los Angeles announcing his desire to "give" his automobiles away. The Muntz advertising, which costs more than \$40,000 a month on a business in cars of \$1,000,000 a month, makes him one of the biggest advertisers in Los Angeles.

But the business reasons behind Earl Muntz must be sought elsewhere. Like all used car dealers, Muntz operates on the money of an auto finance company. His concern is Pacific Finance Corp. of California (BW—Jun. 12 '43, p. 105) which has long been in the auto rediscount business. Its special peculiarity, however, is that it is owned by Lockheed Aircraft Co.

• **Bold Financing**—But the significance is not that Lockheed will build automobiles after the war. Some folks think that Muntz may employ his selling technique and his organization in order to sell Lockheed's air flivvers after the war.

It has naturally taken a certain financial boldness for Muntz to start from scratch and outsell his nearest used-car competitor two-to-one in two years. Many dealers in Los Angeles have worried so much about the deflationary effect of the war's end on their inventory that they have been hesitant to operate. Thus it took considerable financial backing (and courage) as a ballyhoo genius to outdistance the field.

• **Actually Conservative**—Muntz, now 30, used to build racing cars with Arthur Sparks, his present partner in the Muntz Sparks Tool & Die Manufacturing Co., a Pasadena firm engaged in war production.

Despite his buildup, Muntz is a soft-spoken, conventional business man with nothing of the side-show barker about him.

• **The Buildup**—Strictly on the promotion side, the person who has pictured Muntz as the "automotive madman" and has kept Los Angeles continually aware of the Muntz success is 25-year-old Michael Shore, account executive of the Raymond R. Morgan Co. of Hollywood.

Shore got his start in auto advertising on the air when he handled the "Smiling Irishman" of New York who depended almost wholly on spot radio announcements for his advertising.



**I wanna give 'em away—but
Mrs. Muntz won't let me.
SHE'S CRAZY!**

OUTSELLING EVERY OTHER AUTOMOBILE DEALER IN AMERICA

Claiming he's the nation's No. 1 used car dealer, California's Earl Muntz drives home his point on blotters that are replicas of his "crazy" billboards.



Want to move 35 Tons?

WE wouldn't tell you how fast America's fighting planes go. That's a military secret.

But we've all read it's well over 300 miles an hour.

We've read too how they hit 700 or 800 miles an hour in dives. And how paint was peeled by the air pressure.

Did you ever stop to think that the plane's flaps and controls have to work surely, smoothly and dependably against pressures like that?

It's done by such mechanisms as you see in the picture.

They are called Lear Actuators.

They are powerful. Some can push up to 75,000 pounds.

They are light. That's a "must" in aircraft.

They are small. They have to fit in available space.

A good many preconceived notions had to go by the board to meet all these requirements. For example, the little electric motor that runs them is full of revolutionary engineering refinements.

Every man and every minute we have now can't make all the motors and actuators that we would like to deliver for Uncle Sam's aircraft.

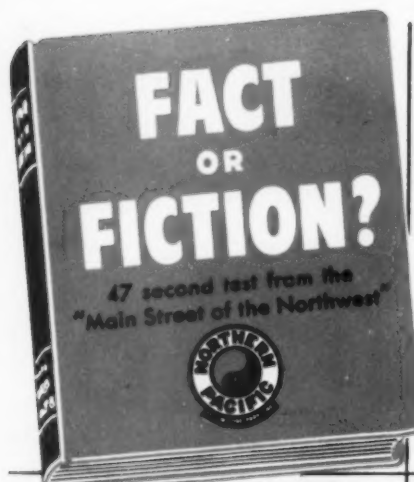
But the day is coming when they will have different jobs to do. New jobs on peacetime products—perhaps like steering ocean liners, or parking cars, or things we've never thought of.

That is one reason for this advertisement. We want to know who can use an actuator or a motor like these.

Another reason is, we want you to know that there is available the kind of thinking and engineering which have produced these and some 250 other Lear products.

**LEAR
AVIA
INC.**

PIQUA • OHIO



Q. Northern Pacific engines annually use enough water for 150,000,000 baths. Fact or fiction?

A. Fact. Wells and tanks of the Northern Pacific Railway supply its locomotives with $4\frac{1}{2}$ billion gallons of water a year.



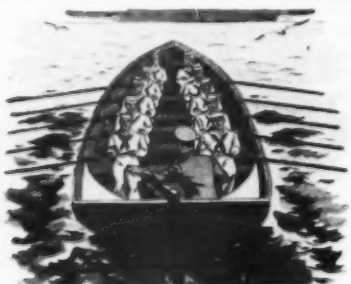
Q. Salmon canning industry is built on fish's homing instinct. Fact or fiction?

A. Fact. Millions are trapped on return to birthplaces in Alaska, Washington, Oregon rivers; more than \$11,000,000 worth shipped annually via the N. P.



Q. Cattle, sheep and hogs are native American meat animals. Fact or fiction?

A. Fiction. Columbus brought them. In 1943, packers shipped more than four hundred million pounds of meat via the Northern Pacific Railway.



Q. The second largest U. S. Naval Training Station is on Pacific seaboard. Fact or fiction?

A. Fiction. It is on Lake Pend Oreille, in a mountain valley at Farragut, Idaho, five miles from the main line of the Northern Pacific Railway.



Q. Teddy Roosevelt tamed Western outlaws along "Main Street". Fact or fiction?

A. Fact. He served as deputy sheriff at Medora, N. D. on the Northern Pacific Railway, known to shippers and travelers as "Main Street of the Northwest".



NORTHERN PACIFIC

MAIN STREET OF THE NORTHWEST

Pepper in Court

Importers contest power of the War Food Administration to order sale of 6,500,000-lb. stock to grinders in the U. S.

Commodities Trading Corp. of New York, pepper importer and holder of about 17,000,000 lb. of pepper, has brought suit in the U. S. District Court in Washington, D. C., to find out if the War Food Administration has the power to force sale of stocks to grinders at the OPA ceiling price of 64¢. WFA has ordered 6,500,000 lb. seized in the New York area; almost 4,000,000 lb. belongs to this one company.

● **Two-Year Supply**—Entire U. S. stocks of black and white pepper total 46,000,000 lb. The U. S. average annual consumption was 30,000,000 lb. This had been reduced to 14,000,000 lb. a year as a result of wartime regulations, which means that present stocks will last only until January, 1946—since the military is getting all it wants, and there are other commitments.

Pepper came from the Dutch East Indies, hence more can't be had until the Japanese are driven out of the spice islands.

● **Counsel Puzzled**—How pepper is "necessary to the defense of the nation," the wording which presumably gives the government power to requisition it under the little-used act of Oct. 16, 1941, puzzles Edward L. Blackman, who is counsel for Commodities Trading Corp.

Holders of pepper claim they can't make a profit at 64¢ and want 10¢ a pound, part of the markup being for warehouse charges. A lot of the pepper in the U. S. has been in warehouses for as much as ten years.

● **Reasons Behind Move**—WFA spokesmen, unwilling to say very much before the case came up for hearing on the company's application for a temporary injunction, indicated that their sole purpose is to prevent a famine in ground pepper while there's a supply of whole pepper in storage. They say many grinders have nothing to grind. If the OPA ceiling is too low for pepper holders, they say, the courts can be used in which to show cause why the government ought to pay more. OPA is silent, too, leaning on its survey of the industry on which its cost experts base their prices.

The difference between "set-aside" orders, which WFA has used for many commodities (butter, cheese, poultry, and others), and "requisition" is one of the legal questions involved.

Cuts Operations 40% to 60%



ROTARY FILES

● Speedy—compact—labor-saving! There, in a nutshell, are the three prime features that have made Cardineer the most outstanding of modern record-keeping equipment. With Cardineer an operator's work is centered at her desk—no eyestrain—no fatigue. Each unit carries 6000 cards for easy reference or posting. Portable, low in cost and ready for *immediate* delivery.

Cardineer is but one of a family of products made by Diebold to cut office routine. Remember, when it's Diebold, it's the latest. Write us.

DIEBOLD, INCORPORATED • CANTON 2, OHIO



INSTANT REFERENCE. Any desired record among Cardineer's 6000 cards is brought instantly to hand by a slight pull on the hand ring. Cardineer means speed in finding, filing or posting.

Ask For Yours: Booklets in time money saving are free as follows. Inventories ☐ Cost ☐ Payroll and Personnel ☐ Plant and Equipment ☐ Purchases ☐ Production ☐ Check and attach to your letterhead.



BUY
WAR
BONDS

DIEBOLD

CARDINEER
Rotary Files

Solve the problem

"Systems to Fit the Routine"

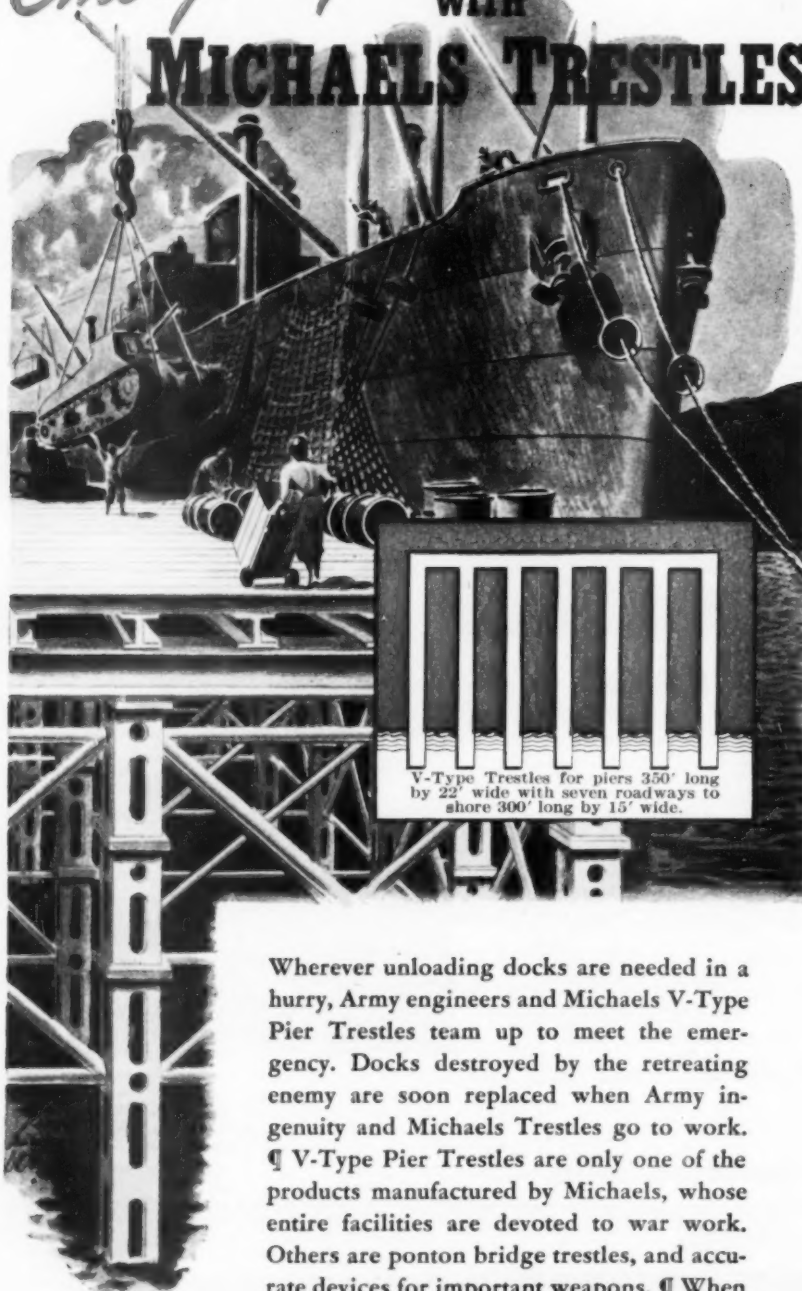
TRA-DEX
Vertical Visible Files

Speed the work

FLEX-SITE
Visible Book

Reduce the cost

Emergency Marine Piers WITH MICHAELS TRESTLES



V-Type Trestles for piers 350' long by 22' wide with seven roadways to shore 300' long by 15' wide.

Wherever unloading docks are needed in a hurry, Army engineers and Michaels V-Type Pier Trestles team up to meet the emergency. Docks destroyed by the retreating enemy are soon replaced when Army ingenuity and Michaels Trestles go to work. ¶ V-Type Pier Trestles are only one of the products manufactured by Michaels, whose entire facilities are devoted to war work. Others are ponton bridge trestles, and accurate devices for important weapons. ¶ When peace comes, Michaels will resume the manufacture of Time-Tight Exhibit Cases, Bronze Tablets, Parking Meters and many other products of ferrous and non-ferrous metals.



The MICHAELS ART BRONZE CO., Inc.
COVINGTON, KENTUCKY

Manufacturers since 1870 of many products in Bronze, Aluminum and other Metals

Sap Is Running

But maple sirup operators fear that labor shortages will cut 1944 output sharply. Price troubles worry the producers.

The maple sap is running in the northern tier of states extending from New England to the Great Lakes, but manufacturers of maple sirup and sugar fear that labor shortages and the farmers' preoccupation with other agricultural duties will cut the 1944 output.

• **An Early Season**—Reclassification of deferred farm workers and acceleration of the draft process this winter began to have a telling effect on the manpower supply as the sugar season was getting under way.

The sap usually starts running about the middle of March and extends to mid-April, but the unusually mild winter advanced it about a month in some areas. In Ohio, the season got under way the first week of February.

• **Improved Methods**—Because of labor shortages in recent years, pipeline systems have become popular in New England. Where the trees are on land of proper grade and elevation, each tree is connected to an intricate system of tubing through which the sap flows directly to the sugar house. This method permits prompt boiling and tends toward improved quality, for the sooner the liquid is processed after leaving the tree, the lighter the color and the finer the flavor of the sirup.

• **Weather Reports**—Michigan farmers were the beneficiaries of a unique weather reporting service this season. Specialists at Michigan State College analyzed the daily weather reports and announced over the college radio station, WKAR, East Lansing, when they expected the sap to begin running. Through this service, the sugar operators were able to take the fullest advantage of the sap run.

Most of the maple sugar and sirup of the United States is made in six states: Vermont, New York, Ohio, Michigan, Pennsylvania, and New Hampshire. Vermont and New York produce about 30% of the national output. About 10% of the maple products used in this country are imported from Canada, where the southern provinces of Quebec and Ontario are the most important producers.

• **Vermont Leads**—The number of trees tapped in Vermont from 1932 to 1941 averaged about 5,000,000 a year; New York, 3,000,000; New Hampshire, 344,000; Massachusetts, 224,000; and Maine, 174,000. Vermont's income

from maple products is estimated at \$2,500,000 annually.

• **Varied Combinations**—Many of the large processing plants of the Northeast are in Vermont, considerable quantities of sirup in normal times being purchased in Ohio, Pennsylvania, and adjacent states. From one-half to two-thirds of the Vermont sirup crop is purchased in 50-gallon drums by the large dealers, processed, and marketed in all conceivable styles and packages.

Also, there are many combinations with cane and corn sirups, combinations that must be clearly stated on the label in terms of percentages of content ever since the federal Food & Drug Administration some years ago undertook a big drive to protect the maple sirup producers from those who simply imitated their wares.

• **Price Troubles**—The maple sugar industry also has had its OPA troubles. The ceiling price which the large dealers are permitted to pay producers is about \$1 per gallon lower than the ceiling price producers may charge consumers.

The result last season was an unprecedented volume of sales from producers directly to consumers, and consequently large processing dealers were able to obtain only a fraction of their usual supply. Because of this situation, some plants were either idle or operating on a reduced scale last year.

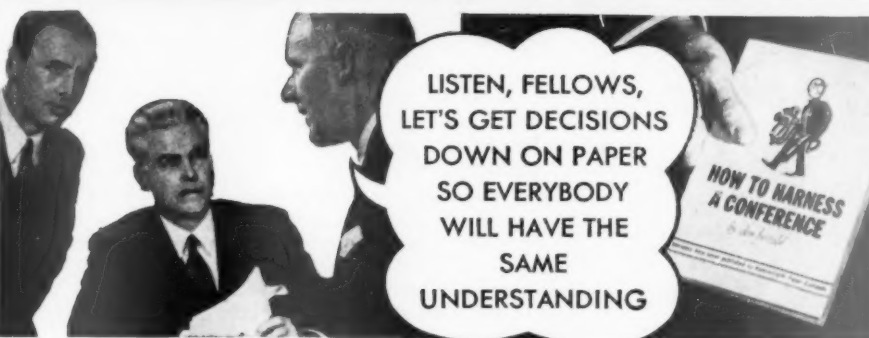
Wartime demand for maple lumber, veneer, and plywood has eliminated a large number of maple sugar orchards in Vermont.

CHECK ON CONVENTIONS

The Office of Defense Transportation has received with ostentatious applause a plan to discourage travel developed by the Philadelphia Convention & Tourist Bureau. Its object is to help the ODT eliminate the use of transport and hotel facilities for all conventions not directly related to the war effort (BW—Nov. 13'43, p34).

The scheme was inspired by a statement of the late Joseph B. Eastman, director of ODT, urging voluntary cancellation of all nonessential conventions and group meetings. It provides that the Philadelphia bureau immediately will discontinue active solicitation of convention business, and that when its representatives are requested to confer with organizations seeking to arrange for conventions they will discourage the holding of large gatherings.

The Philadelphia bureau will confine its mail and other promotion to appeals for war conferences and postwar meetings. When it can be shown that a meeting or convention will help shorten the war, Philadelphia hotels will accept



**THIS IDEA-BOOK TELLS
HOW TO FOLLOW UP
CONFERENCES WITH ACTION.
SEND FOR IT!**

"How to Harness a Conference" is offered by Hammermill to help you eliminate misunderstanding, buck passing, waste motion from your business meetings. It's full of specific suggestion for organizing and planning a conference—on paper. It outlines ways to guide a meeting, keep it on the beam, decide exactly who is to do what and when—then turn those decisions into action—by "putting it in writing." Send for it.

LOOK FOR THE WATERMARK

IT IS HAMMERMILL'S WORD OF HONOR TO THE PUBLIC

"KNOW HOW"
Ask for dependable Hammermill Bond on your business printing orders. Its quality is safeguarded by scientific tests and by 45 years of "know-how" in making economical writing papers.

**SEND FOR
THIS FREE
BOOK**

**HAMMERMILL
BOND**

BUY BONDS EVERY PAYDAY

Hammermill Paper Company, Erie, Pa.
Please send me—free—my copy of Hammermill's idea-book, "How to Harness a Conference."

Name _____ Position _____

(Please attach to, or write on, your company letterhead)

Even a Newspaper Has a Heart



...beating warm and friendly,

despite the race to bring its readers

the news of all the world—

the day it happens!



I suppose the editor is the brains of the Journal but I guess you might say Mr. Fixit is the heart. I don't think.

THE Oregon Journal's heart is reflected in these words of its founder, the late C. S. Jackson:

"The strong need no defender; the weak do. The powerful have many newspaper supporters; the poor have few."

Little wonder then that Journal readers call "Mr. Fixit" the heart of The Journal. In a daily column "Mr. Fixit" gives more than just friendly and understanding advice. "Mr. Fixit" gives help!

A sister is seeking a long lost brother. A working mother wants a home for her baby. An Army cook in the Aleutians needs an alarm clock. These and scores of others write to "Mr. Fixit" for help! Their letters reprinted in the Fixit column bring immediate and widespread response from Journal readers. That's how "Mr. Fixit" gets things done!

The Fixit theory is, "People never let other people down—if they know about them." So, "Mr. Fixit" listens to the needs, the heartaches and pleas of individuals and then, through the medium of The Journal's great metropolitan circulation, tells other people about them.

There is human need everywhere . . . and there is an abundance of human kindness everywhere, too. The Fixit column brings the two together and gets action!

Countless thousands of tales could be told about "Mr. Fixit", but the sentence in the letter illustrated above just about sums up the story.

THE FIXIT column is just one of the many reasons why men and women in the Portland Area like to read The Journal . . . a human newspaper from the weather reports in the upper left hand corner of page one, to the last classified want ad. It's a paper staffed by people with brains and hearts . . . giving their best . . . and enjoying it to the utmost.

If you lived in Portland you'd read...

THE JOURNAL
PORTLAND, OREGON
Afternoon and Sunday

Represented Nationally by REYNOLDS-FITZGERALD
Member: Metropolitan and Pacific Parade Groups

reservations, but not more than 30 days in advance.

The ODT likes the plan so well that it has urged its immediate adoption by the American Hotel Assn., International Assn. of Convention Bureaus, and other hotel and travel organizations.

Fleet to Grow

Launching of new fishing vessels in 1944 expected to aid in enlarging the catch; Ickes predicts 4,000,000,000 lb.

The first of a dozen trawlers and draggers for Boston's half-sized fishing fleet was launched late in January, and others are following at a rate of almost one a month.

Some 528 new vessels have been promised to fishermen, and on the basis of this expansion, Fish Coordinator Harold L. Ickes estimates a 1944 catch of 4,000,000,000 lb. of fish and shellfish, greater than the 1942 and 1943 hauls but short of the 4,400,000,000 lb. averaged in the thirties.

● Trawlers at War—The Navy has been using half of the Boston fishing fleet for



CANNED HEAT

Steaming soup is produced within four minutes after touching off the fuse of a heating element within a new can developed by Imperial Chemical Industries, Ltd., in collaboration with H. J. Heinz Co. Distributed in great quantities to American and British troops, the self-heating can is a favorite with soldiers in cold climates. They tuck it inside their jackets as a hot water bottle substitute.

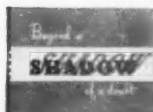


That's right . . . take a hair, magnify it 62.5 times . . . result — a husky rod. This is just what Jones & Lamson Optical Comparators do to those tiny dimensions that are difficult, or even impossible, to measure by any other means.

If you are a manufacturer of parts that must be right — to a hair — it will pay to investigate Jones & Lamson Comparators. These machines are designed for use in the shop (they don't have to be babied), and they can be used as easily as a mechanic's scale.

Jones & Lamson inspection engineers are at your service to study your particular measurement and inspection problems. Call on them today!

MEASUREMENT AND INSPECTION—BEYOND A SHADOW OF A DOUBT!



This book, "Beyond a Shadow of a Doubt" will be sent to executives asking for it on their firm letterhead.



PRECISE PRODUCING
MACHINE TOOLS

**JONES & LAMSON
MACHINE COMPANY**

OPTICAL COMPARATORS Springfield, Vermont, U.S.A.
Manufacturers of: Universal Turret Lathes • Fay Automatic Lathes • Automatic Double-End Milling and Centering Machines • Automatic Thread Grinders • Optical Comparators • Automatic Opening Threading Dies and Chasers.

West Coast Ports Share in Russian Trade Boom

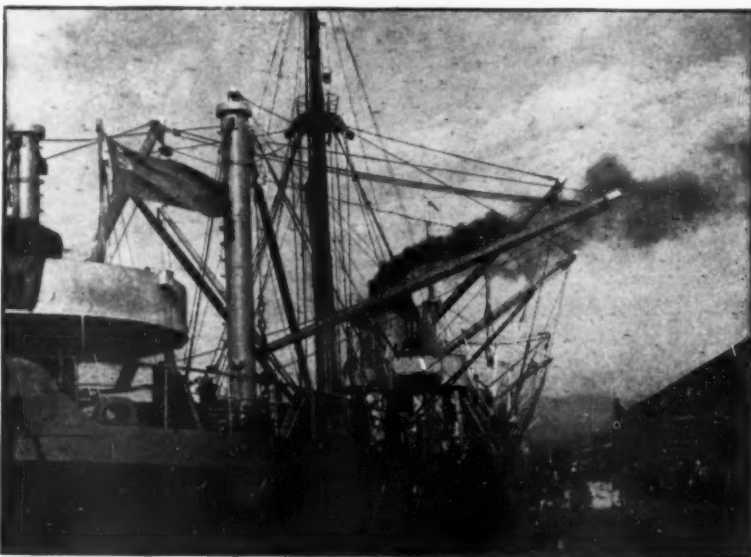
With 70 Liberty ships reputedly flying the Soviet flag on the North American-Vladivostok run (BW—Mar. 18'44, p. 111), West Coast ports both in Canada and in the United States are sharing a wartime trade boom.

• **Safe Passage**—In January of this year, Canada's shipments to Russia (below)—including foodstuffs, clothing, and a wide variety of armaments—totaled \$7,845,000 as against \$647,000 the previous January. Although destined for the Russo-German front, the goods are assured safe passage across the North Pacific because Rus-

sia is not at war with Hitler's ally, Japan.

Portland, Ore., has run into a special byproduct of mounting Soviet shipping. For many months, incoming vessels flying the hammer and sickle have had among their crews large numbers of Russian youngsters (right), some no more than twelve years old.

• **Cadet Seamen**—Orphans of the battles of Leningrad and Stalingrad, they have found temporary homes on ships where, as cadet seamen, they do light jobs and study mathematics and navigation. During shore leave, these



cadets are guests of Portland school children who treat them to visits to the movies.

Food for Russia in great quantities is now shipped from various West Coast ports. One port alone sends between 30,000 and 50,000 tons a month, including dried eggs, powdered milk, cheese, canned meat, linseed oil, flour, and dried peas. Another port is specially equipped to load locomotives—eight to a ship.

• **Relief Shipments**—Russian War Relief, Inc., and the American Red Cross have big warehouses and various ports. One R.W.R. warehouse alone has baled, cased, and shipped 2,160,000 lb. of clothing and 230,000 lb. of shoes. Last November, one carload of surgical instruments valued at \$584,000 was transhipped to a waiting Soviet vessel for rush delivery to the Soviet Union.

cutters and minesweepers. A General Sea Foods beam trawler is in action at Guadalcanal, 10,000 miles from its base. The diesel-powered trawler is making island-to-island runs transporting Marines to fighting fronts, carrying mail, doing patrol service. Other units of the fishing fleet also are in foreign waters.

Fishermen in Boston, New Bedford, and Gloucester have been yelling for additional units to replace those drafted for service. Their loudest squawk is that some of them are forced to rotate with other trawler crew members in order to get a week to ten days a month of fishing.

• **They Will Benefit**—These beached fishermen will benefit most by the new craft. Scene of the launchings is the Taunton River, where Somerset Shipyards, Inc., is working to get the boats into Mt. Hope Bay (across from the Fall River shore) in a steady stream of monthly production all during 1944.

Of all-welded steel, the new trawlers and draggers will be sturdier craft than their predecessors, powered with 320-hp. Fairbanks-Morse diesels, laying 96 ft. over-all length (88 ft., 2 in. at waterline), having a draft of 10 ft., 3 in., capable of hauling 200,000 lb. of fish at 9½ knots.

The boats will accommodate eight-man crews and will hold some 6,200 gal. of fuel. Fresh water capacity is 1,200 gal. Plans call for commodious galleys with iceboxes, sinks, tables, seats, and ten berths forward, four in the deckhouse aft.

• **Surplus of Steel**—Somerset Shipyards stopped making water-carrying barges for the Army last October, and when the Navy canceled an expected contract almost at the same time, the company found itself with 900 tons of steel and steel plate on hand.

Somerset's officials obtained federal approval to go ahead with trawler-dragger construction to augment the

shrunk Boston fleet. Customers were not difficult to find; some half-dozen wholesale fish concerns in Boston, New Bedford, and Gloucester jumped at the chance to buy.

Meanwhile, WPB has authorized further construction material to build 101 more new fishing boats for the War Food Administration.

ALUMINUM FOILS ENEMY

Use of paper-backed aluminum foil to confuse enemy radio anti-aircraft detecting systems came to light recently when Nazi raiders over the British Isles adopted the same trick.

The foil is cut into straw-like, slotted strips about a sixteenth of an inch wide, packaged in handy little bundles, and tossed out by observation planes at locations far from the real targets, to draw fighter plane defenders into wild goose chases.

NOW JOHNNY THOMPSON'S EYES GET FEWER TREATMENTS

—Because of You?...

John Thompson* was a careful man, a loving husband and father. Years ago, he faced the fact that he might not always be "around" to provide for his family. So he chose life insurance to do it for him, arranging for his wife and son and daughter to have a regular monthly income. You know and we know that there is no better way to make such a thing certain. Yet, let's look at what happened after John Thompson died last year:

He had provided enough for rent and home maintenance. Enough for plain, good clothes. Enough for his talented daughter to continue the violin lessons that mean a career for her. And enough for his stout-hearted but nearly blind son to have the regular eye treatments he needs. John Thompson called these things necessities, and he even arranged for a little more, so that his beloved wife might spend a dollar now and then—"just for fun"...

He had provided all of those things...

But food costs more. Clothes cost more. Home expenses are more. Yet the family income is fixed. So there will be no more violin lessons for his daughter—fewer treatments for his son. There will be many another sacrifice, because in spite of John's careful planning and the dependable and regular insurance payments, *the dollars buy less*. Something called inflation crept in between John and his plans and made those dollars buy only 75 or 80 cents' worth of what he thought they would.

Did you help break down the security he planned for his family? Have you paid "a few cents extra" to get food over ceiling prices? Have you outbid Jane Thompson for warm clothes? If you have, and if you don't stop, your turn will come. And if you help runaway inflation to come, you may find your carefully planned insurance income brings dollars worth no more than German marks in 1920. *It took a million marks to buy a loaf of bread.*



*Not his real name, of course.

TO HELP LIFE INSURANCE DOLLARS AND ALL OTHER DOLLARS DO THEIR JOB, Do These Three Things:

Encourage our representatives in Washington to tax our extra income away. Hard, but it's easier than inflation, and saddling our children with War's cost.

Follow the price control rules. They can hold down the cost of living—but they won't work unless everyone helps.

Save—Invest in War Bonds... for America's post war future and your own. One form of saving, life insurance, does double work, for many premiums are invested in Government bonds. The amazing thing about life insurance today is that the more of it we all buy, the more the dollars from it will be worth tomorrow.

DIESEL AND AIRCRAFT CORPORATION

1120 Leggett Avenue, New York 59, N.Y. Builders of diesel-electric equipment and aircraft parts for our armed forces. Divisions: Hill Diesel Engine Company, Edwards Company, Edwards Aircraft Products, Inc., Ideal Power Lawn Mower Company.



TRADE MARK REG.

Diesel Engines, 5 to 2000 h.p. » Gasoline Engines » Generator Sets » Generators » Power Units
Switchboards » Pumping Units » Hydraulic Aircraft Equipment » Recoil Mechanisms » Power Mowers
Power Brushes » Snow Removal Equipment » Streamlined DeLuxe Railway Motor Trains » Diesel Locomotives

COMPLETE REPRINTS of this message for poster use will be supplied upon request, subject to the limits of our paper allotment.

YOUR NORTHERN NEIGHBOUR AND THE POSTWAR

Look North, Mr. Manufacturer. For over four years Canada has been making a large contribution to the Battle of Production. She will also be ready to contribute to the needs of peace.

To supply these needs, is it not to your advantage to have your product manufactured in Canada?

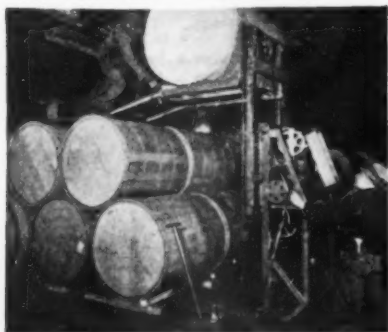
We have a well-equipped plant, ready as soon as war contracts permit, to make your product for the Canadian markets—and for export to world markets under favourable conditions. For production in quantity of metal products, light or heavy machine manufacture, and the fabrication of structural steel, get in touch with us now.

Ask
**HAMILTON BRIDGE
COMPANY LIMITED**
HAMILTON ONTARIO CANADA

REVOLVATOR PORTABLE ELEVATORS

1 + 1 = 4

When You Use Our Mechanical Man



Two men plus REVOLVATOR piling 1200 lb. barrels in tobacco warehouse. Heavy cases, crates, rolls, bales, barrels or drums may be stacked with equal ease.

A REVOLVATOR plus two men can lift, pile or stack goods faster than four men by "main strength" method. Let REVOLVATOR help your manpower shortage. Twenty-seven models cover all usual needs.

Tops: hinged or telescopic; hoists: electric with push button control, hand or combination; bases: revolvable, fixed, or skid types. Moderate prices which enable them to quickly pay for themselves in time and labor saved.

Send for special folder BW showing how you can free men for war by using REVOLVATOR mechanical men and RED GIANT LIFTRUCKS.

REVOLVATOR Co.
DESIGNERS AND MANUFACTURERS OF MATERIAL HANDLING EQUIPMENT

2011 86th St. NORTH BERGEN, N. J. Since 1904

PRODUCTION

Job for Foundry

Experimental project to develop castings practices for the aircraft industry. Program has Army Air Forces' backing.

First and immediate job of the American Brake Shoe Co.'s new experimental foundry, which opened a couple of weeks ago at Mahwah, N. J., is the "development of pilot centrifugal and static castings practices for the aircraft industry."

• **Spurred by Air Force**—As a matter of cold fact, the plant would have remained in the blueprint stage indefinitely if the Wright Field engineers of the Army Air Forces had not become concerned with volume deficiencies in the procurement of aircraft forgings.

One way to ease the situation was to substitute high-strength castings, which will need considerable piloting before they are ready for production, and when the engineers learned that Brake Shoe was stymied on its plans for an experimental foundry by lack of the necessary priorities for construction materials, they found a way for the Air Forces to sponsor a priority application.

• **Details Are Secret**—Despite the fact that WPB came through promptly with an authorization for immediate construction and that the National Research Council's war metallurgy commit-

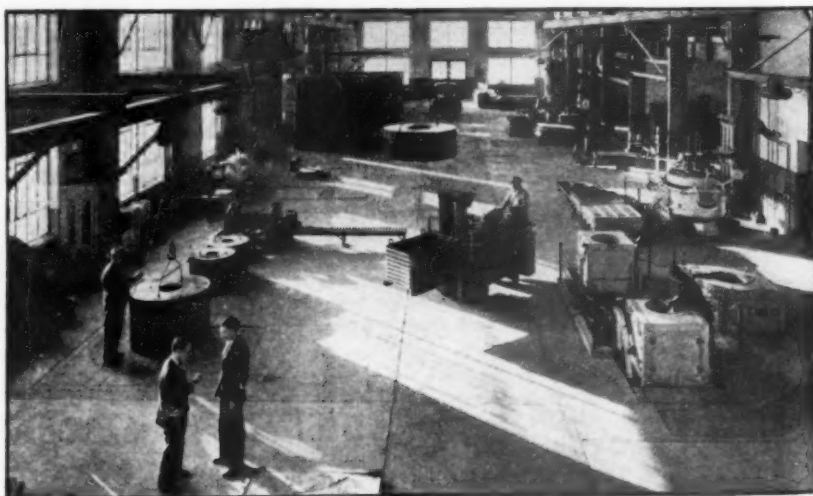
tee assigned the company a rating of "correlation research project," the program might have been further delayed if an idle, steel-framed plant had not been discovered 1,200 miles away at Kansas City, Kan., with enough structural steel and steel window sash (250 tons in all) for the building job in Mahwah.

Censorship will not permit any precise description of the work now under way in the commodious 196x82-ft. plant, which adjoins and is under the supervision of the company's metallurgical research laboratory; scope of the work may only be hinted at by the variety of the equipment that has been and will be installed.

• **Five Furnaces**—Melting equipment consists of five electrical induction furnaces ranging in capacity from 100 lb. to 200 lb. and a 1,000-lb. arc furnace—all available for ferrous or nonferrous melting; molding equipment includes vertical and horizontal centrifugal machines as well as equipment for static castings; all facilities are serviced by an overhead traveling crane.

Pending completion of the job for the Air Forces, and until the war situation is well in hand, the only further work contemplated will be experiments assigned by the research council plus certain wartime research projects for the eight operating divisions of the company.

• **Postwar Job**—After the war, the principal assignments of the foundry will be: (1) experimental and research work for



Equipment of Brake Shoe's new experimental foundry for research on ferrous and nonferrous castings includes vertical and horizontal centrifugal casting machines (left), induction furnaces (right), and a 1,000-lb. arc furnace.

Flexibility to Meet Needs

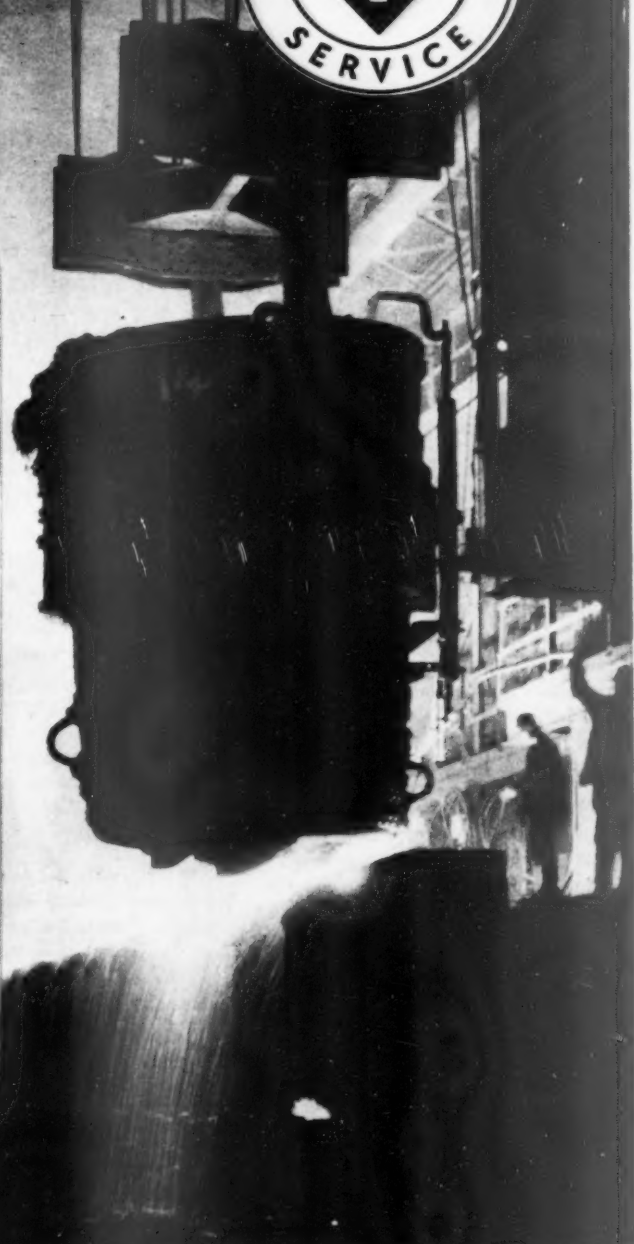
Since its modest beginning in 1900, the growth of The Youngstown Sheet and Tube Company has been stimulated by flexibility in management . . . a flexibility conceivable only under Free Enterprise. Constant alertness to the nation's steel needs and exercise of sound judgment in equipping promptly to supply those needs built Youngstown from a \$600,000 start to its present size, with assets of \$260,000,000.

In its infancy, the company quickly sensed the growing importance of steel pipe--and prepared to serve exceptionally well such major markets as oil, gas, power construction and electric conduit. In these four decades likewise came the automobile, electric refrigerator, range, washer, and other mass-produced items of fabricated steel...made possible by mass production of steel sheets, strip, bars and other related products. In these advances, Youngstown has been at the forefront--striving always to provide more modern facilities, and up-to-date methods -- to make better steel.

Corollary to this growth -- *all important* now in time of national emergency -- the company's success enabled it to have up-to-date plants and equipment, well trained and experienced employees, and alert, courageous and resourceful management. Pearl Harbor brought no period of indecision or delay. The coming need for steel for war had been anticipated. Immediately, Youngstown could place its facilities, materials and manpower squarely behind the war effort.

America can thank Free Enterprise for its industrial strength. Only by keeping enterprise free can this nation have industries that stay healthy and vigorous, able to anticipate peacetime trends and at the same time capable of springing to its defense in hours of desperate need.

Historical Series . . . No. 13



TEEMING STEEL INTO INGOT MOULDS

YOUNGSTOWN

THE YOUNGSTOWN SHEET AND TUBE COMPANY

YOUNGSTOWN, OHIO

Manufacturers of

CARBON · ALLOY AND YOLOX STEELS

Pipe and Tubular Products · Sheets · Plates · Conduit · Bars · Tin Plate
Rods · Wire · Nails · Tie Plates and Spikes · Alloy and YOLOX Steels



V Day for Everybody

Zero Hour for Your Postwar Plans

NO ONE knows when V Day will come, but when it does you'll need your working capital in shape to go to work...to translate postwar plans into immediate action, so competition won't get a head start in the markets of a new and better world. And on V Day you may be glad you decided to learn more about American Credit Insurance *now*.

With credit insurance, your working capital won't be affected if an abrupt halt to war activities upsets some of your customers...and they suddenly find themselves unable to meet their obligations. *Your* postwar plans won't have to be held up, awaiting settlement of delinquencies or insolvencies.

American Credit Insurance *guarantees* payment of your accounts receivable. It guarantees, *for a year to come*, that abnormal and unpredictable credit losses will not impair

your working capital...or your credit...or your profits. In short, it gives you certainty in place of uncertainty.

Your Credit Manager investigates, appraises and controls credits on all accounts as usual. American Credit Insurance supplements his work and fortifies his judgment...by protecting you against defaults due to developments after (or undiscovered before) goods are shipped.

Manufacturers and Jobbers in over 150 lines of business carry American Credit Insurance. You need it too. For further information, write for our booklet, "The A-B-C of Credit Insurance." Address: Dept. 42, American Credit Indemnity Co. of N. Y., First National Bank Building, Baltimore-2, Md.

J. T. Fadden

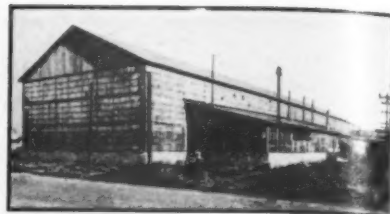
President



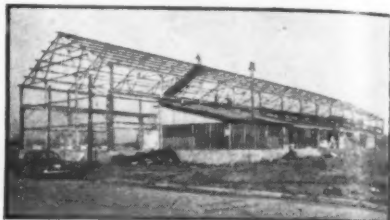
American Credit Insurance

*Pays You When
Your Customers Can't*

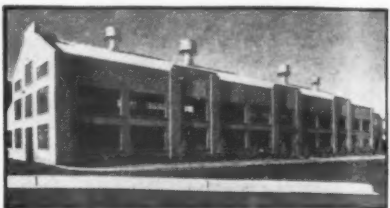
OFFICES IN PRINCIPAL CITIES OF UNITED STATES AND CANADA



An idle, steel-framed plant, discovered at Kansas City, Kan., furnished the



structural steel and steel window sash for the American Brake Shoe Co.'s



new experimental foundry, at Mahwah, N. J., some 1,200 miles away.

Brake Shoe's 40 other foundries and their customers, with particular stress on new products, foundry practices, melting techniques, and rigging; (2) the training of personnel for all operating divisions.

CONVERT COMBAT PLANES

Needing more cargo carrying planes, the Navy recently began calling back from combat zones some of its Consolidated Vultee four-motored Coronados (PB-2Y-3) for conversion.

Vultee was busy with new production, but turned to the small Rohr Aircraft Corp., in San Diego, an idea and parts concern, to take care of the remodeling.

The number of planes to be changed over is reported as "scores." Rohr clears out all obstructions that would interfere with cargo, reroutes the surface control cables, removes gun turrets, rearranges crews' quarters and working space, removes the supercharger, and installs smaller engines.

The reconverted Coronado is thousands of pounds lighter (for combat it weighs 33 tons), will carry 44 passengers, including a crew of five, or 24 passengers and 8,600 lb. of cargo.

All in the Pool

Patent-sharing plan now embraces firms managing GR-S plants for government—implying postwar control of raw materials.

The synthetic rubber patent pool, despite early holdouts—(BW—May 1 '43, p14), has been completed. Every company that has a management contract in the government program, it was disclosed this week, has joined the pool or is in process of completing its legal arrangements to do so.

• **Government Control**—Only companies cooperating in the pool are to have access, after the war, to the patents under which the tire rubber (GR-S) plants are operated. This implies government postwar control of the rubber manufacturers' raw material supply, except so far as foreign trade in natural rubber, private ownership of specialty rubber patents not included in the government pool, and new technical developments can loosen up the present status of virtual government monopoly.

The government has one other tie



FOR SAFER WELDING

A new type ventilated mask protects welders against "spelter shakes" or "galvo fever," caused by inhaling the fumes from molten galvanized metals. Developed by Chicago's Pullman-Standard Car Mfg. Co., the headpiece is designed to dispel the toxic oxides which produce a pneumonia-like chill that's more annoying than dangerous. Compressed air, delivered by hose to a nose outlet, also prevents moisture condensation inside the mask.



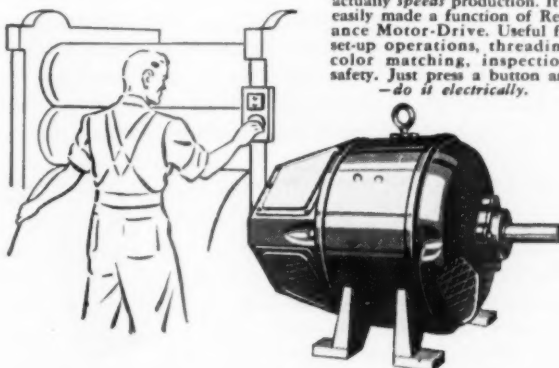
INCHING



Slow speed for inching, threading and close inspection of work in process is but one example of the versatility of Reliance Motor-Drive. Properly applied, motor-drive is *more than power*. In addition to controlled and variable speed, it can be the means of: smooth, controlled acceleration—automatic reversing, quick stopping—control of tension—tandem operation. With Reliance Motor-Drive these functions can be provided electrically, eliminating such mechanical devices as clutches and gears.

Reliance engineers have had wide experience in developing new uses for modern motor-drive and, in cooperation with plant engineers, adapting basic developments to specific industrial problems. Perhaps this experience can be usefully applied in *your* plant. It is available on request.

Ask for Bulletin 311 showing applications of an all-electric adjustable-speed drive for A.C. circuits.



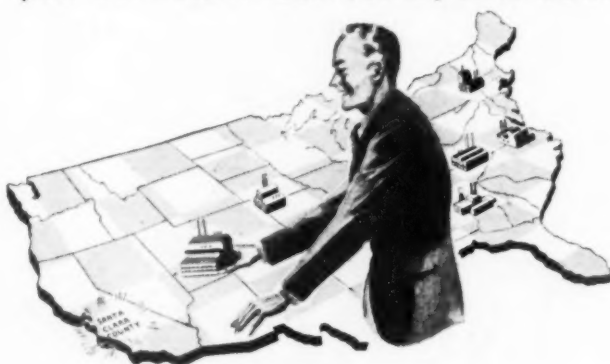
There's one "slow-down" that actually *speeds* production. It is easily made a function of Reliance Motor-Drive. Useful for set-up operations, threading, color matching, inspection, safety. Just press a button and —do it electrically.

RELIANCE ELECTRIC & ENGINEERING CO. 1069 Ivanhoe Road • Cleveland, Ohio

Birmingham • Boston • Buffalo • Chicago • Cincinnati • Detroit • Greenville (S. C.)
Houston • Los Angeles • Minneapolis • New York • Philadelphia • Pittsburgh
Portland (Ore.) • St. Louis • Salt Lake City • San Francisco • Syracuse • Washington, D. C.
and other principal cities.

RELIANCE^{AC} DC MOTORS

Far sighted manufacturers are selecting their post war Pacific Coast Factory Sites NOW!



It's your move!

Times are changing. When this war is won, unless you have a plant on the Pacific Coast, you won't be in a preferred position to serve 16 million residents of the eleven Western states ... and 800 million new customers in the Pacific Basin area.

WESTWARD TREND • Yes! Industry is moving West, and one area, Santa Clara County, strategically located at the population center of the Pacific Coast, is specifically earmarked as the coming industrial center of the Pacific Coast.

LOCATION...PLUS! • The map tells part of the story. Santa Clara County is the population center ... closer to all major markets. It's the shipping center, too ... just 30 miles from the docks of San Francisco Bay.

NAMES OF NOTE • Santa Clara County manufacturers, such as Food Machinery Corp., Joshua Hendy Iron Works, Permanente Metals Corp., and scores of others tap the greatest electrical power pool in the world...enjoy a surplus of natural gas...benefit from the lowest tax rates of any major industrial area ... and have experienced an exceptional labor record.

WRITE TODAY • Industrially young...and aggressive...Santa Clara County invites you to share in the industrial prosperity of Post War Pacific Coast. But first—get all of the facts—up-to-the-minute, and in detail.

Write for Post War Pacific Coast...a 36-page book about the Pacific Coast and Santa Clara County. No cost or obligation...but use your business letterhead, please.



DEPT. "W", SAN JOSE CHAMBER OF COMMERCE, SAN JOSE, 23, CALIF.



SANTA CLARA COUNTY *California*

The population center of the Pacific Coast

that binds rubber manufacturing closely to national policy. Defense Plant Corp. pointedly omitted purchase options from its rubber plant contracts. The only DPC obligation to its synthetic rubber plant managers along this line is a 60-day negotiation period, when contracts are canceled, and a concurrent six-month right of first refusal if the government decides to sell.

• **New Plants Cheaper?**—A prophecy that "many of the present plants will almost certainly be abandoned" comes from the National Planning Assn. in its latest pamphlet, "Outlook for Synthetic Rubber," a study that has been made by Melvin A. Brenner.

Brenner reasons that manufacturers might find it more economical in the long run to build new, more efficient units, even if the wartime plants could be bought at a considerable discount. He cites refinery conversion units—probably the least efficient and most costly section of the program—as those to be abandoned first, and predicts that the grain alcohol process of making butadiene—chief feed stock for GR-S—would prove too expensive for peacetime production unless subsidized.

Safety by Color

Adoption of uniform code of hues as warnings of hazards is urged to prevent accidents in U. S. industrial plants.

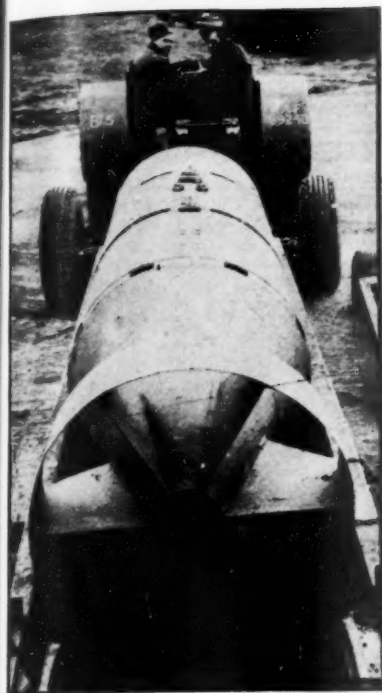
A new "Safety Color Code for Industry," developed by E. I. du Pont de Nemours & Co., and indorsed by Ned H. Dearborn, executive vice-president of the National Safety Council, was submitted for study by the Greater New York Safety Council at its annual convention this week.

• **Uniformity Recommended**—The code, which in a way includes and is an outgrowth of the "three-dimensional seeing" plan of painting machinery with vision-assisting colors sponsored jointly by du Pont and the Philadelphia Electric Co. in the fall of 1941 (BW—Oct. 4'41,p32), recommends the establishment of standard safety colors, each one of which would always mean identically the same type of warning wherever used throughout industry.

Matt Denning, representing du Pont, told the convention that order would be brought out of confusion if the following colors were to be adopted all over the country:

Yellow, the most visible color, to warn against hazards contributing to stumbling, falling, head-bumping, etc.

Orange, the most stimulating hue, to



BOMBS GROW BIGGER

The RAF's new 12,000-lb. super-blockbuster illustrates how bomb sizes are keeping pace with the ever-mounting air war that now is making 1,000-plane raids over Nazi Europe almost commonplace. But thus far it has seen very little service. That's because comparatively few types of Allied bombers can carry it and because the newest bombing technique puts more emphasis on the small incendiaries.

warn against parts of machines or mechanisms that cut, stamp, form, or shock electrically.

Red, which has long since lost caste as a danger signal because of poor visibility, to indicate the locations of all fire-protection apparatus.

Green, the traditional safety color, to point out locations of first-aid cabinets, stretchers, and other safety equipment.

Blue, to be borrowed from the railroads to caution against handling, starting, or moving any machine or device, such as control valves or equipment under repair.

White, to mark aisles on dark floors; black to mark aisles on light floors; gray to mark locations for waste receptacles, cuspidors, and so on.

• **For the Color Blind**—Because approximately 4% of all male workers are color blind, it is further suggested that certain geometrical symbols should always accompany and identify particular safety colors.

*"If this is Taxes,
gimme Death..."*



Bill just meant to be funny, but the Old Man didn't take it that way. After all the nightwork and pressure, Bill looked like a close candidate for a casket. And head accountants like Bill didn't bounce out of every business college. With taxes, group insurance, war bonds, hospitalization fees, and union dues making every paycheck a jigsaw puzzle, the payrolls were bad enough. But in paying off Mr. Whiskers every ninety days...filing Victory taxes and Social Security for thirteen weeks, with extra overtime, shift changes and worker turnover...and balancing gross payrolls for the period—Bill pretty near blew his top...

So THE NEXT week a McBee man came around and went into a huddle with Bill. Later on, he came back with some suggestions that made Bill's eyes

pop. A little savvy, specially designed Keysort cards and Waxspot forms that eliminate copying...made the odd amount due to Uncle Sam on each paycheck a simple adding machine chore at the end of the quarter. Bill says he believes in Santa Claus again... Big Admission for an accountant!

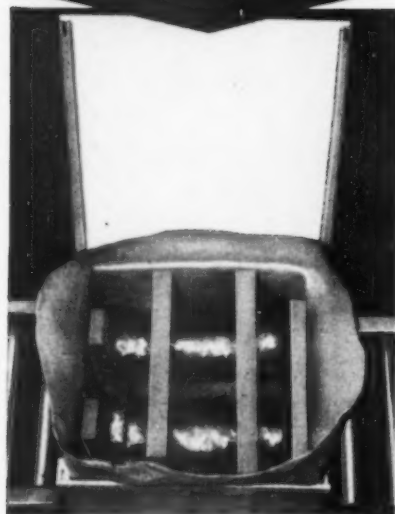
McBee methods simplify, speed up and short-cut records and reports...are easy to understand, usable by ordinary office people and require no special skill, machinery or expensive installation. Custom fitted to your own business, McBee methods save time, work, worry, usually reduce clerical expense...are invaluable in these days of office personnel shortage. If you want faster business information, you want to see a McBee man.



THE McBEE COMPANY
SOLE MANUFACTURERS OF KEYSORT

295 Madison Avenue, New York 17, N. Y.... Offices in principal cities

**A GENERAL
WIREBOUND
BOX IS
"PART OF THE
PRODUCT"**



The two generators above are securely blocked in a General Wirebound container which is "part of the product" until it reaches the user. In addition to providing protection, General Box Company engineers specified a chemically-treated jacket and wax-dipped blocks so that the jacket and blocks would not give off moisture and develop rust on the generators. Another example of how General Box Company can solve shipping problems for you tomorrow.

GENERAL BOX COMPANY

General Offices:

502 North Dearborn St., Chicago, Illinois.

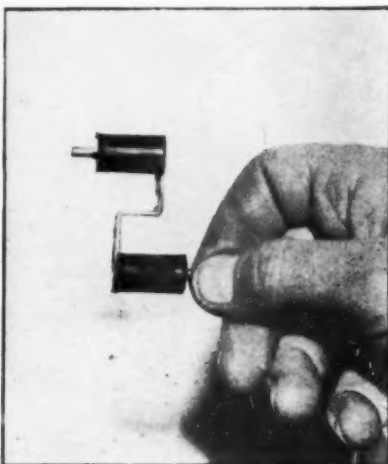
District Offices and Plants: Brooklyn, Cincinnati, Detroit, E. St. Louis, Kansas City, Louisville, Milwaukee, New Orleans, Sheboygan, Winchendon. Continental Box Company, Inc., Houston, Dallas.

NEW PRODUCTS

Resilient Mounting

Cylinders of rubber or other rubber-like materials interconnected by ingeniously formed metal arms make up the new S-Type Resilient Mounting for supporting aircraft compasses, phonograph motors, and other components requiring extremely soft suspensions under light loads and with considerable freedom of movement.

The patented device, which will be manufactured by the B. F. Goodrich Co., Akron, Ohio, is said to handle a



"variety of stresses including shear, bending, torsional, or twisting" and to permit it to be "stressed simultaneously under both shear and tension. . . . Various arrangements of the rubber cylinders and arms to which they are attached will change the rate of deflection of the new mountings in any direction." The degree of movement in any direction is "controlled by the way in which the mounting or groups of them are installed."

Electronic Motor Drive

Newest device for controlling and adjusting speed is the Weltronic Electronic Motor Drive, developed by the Weltronic Co., 20735 Grand River, Detroit 19, for operating a standard d.c. shunt motor from a.c. power. The outfit is housed in a compact cabinet for quick installation.

Electronic rectifier tubes convert a.c. to d.c., supplying separate power to the armature circuit and the field circuit of the motor. Each circuit is individually controlled through other electronic tubes to provide speed adjustment and current regulation. The method used to control armature current is claimed to prevent "excessive current ripples

which are characteristic of conventional electronic motor controls and necessitate the use of special armature construction." Complete stepless control of motor speed is said to be obtained.

THINGS TO COME

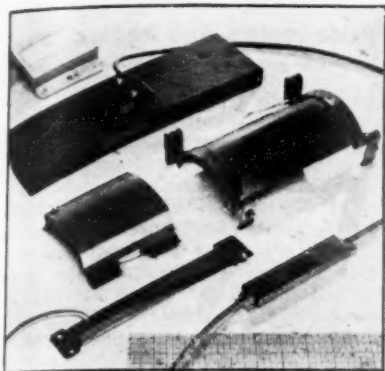
Final X-ray inspections of large and more or less complicated assemblies such as automotive axles and airplane superchargers are foreshadowed by current fluoroscopic examinations of small, metal-housed radio tubes which reveal whether all their filaments and plates and grids are present and in place at the right locations. What's more, a manufacturer and his customer will not have to take an inspector's word for the presence and adjustment of all components; there will be a record photograph of each fluoroscopic examination as proof.

You won't have to unzip your postwar "windbreaker" all the way and expose your torso to the chilling breezes when you reach for a cigarette in the pocket of your shirt. The garment will be equipped with a new "double-acting" zipper with two sliders on the track which has been developed for tents, sleeping bags, gun covers, and other military equipment. You will zip one slider up a little and the other down, leaving just enough room for your hand to sneak through with a minimum of pneumonia-inviting exposure.

From the early days of phonographs and recorded sound, you have had a choice of disks or cylinders. With the coming of peace, you will find available not only disks for entertainment and cylinders for office dictation, but at least six further choices: (1) steel tape with sound vibrations recorded magnetically; (2) steel wire similarly magnetized; (3) cellophane tape records with sound tracks impressed into the surface; (4) cellulose-acetate tape similarly impressed; (5) cellophane tape with sound recorded photographically for electronic reproduction; (6) cellulose-acetate tape of similar photographic-electronic type.

Contact Heaters

Comparison with the inch marks on a ruler in the photograph of several new H. & A. Electric Contact Heating Units reveals their compactness. They are be-



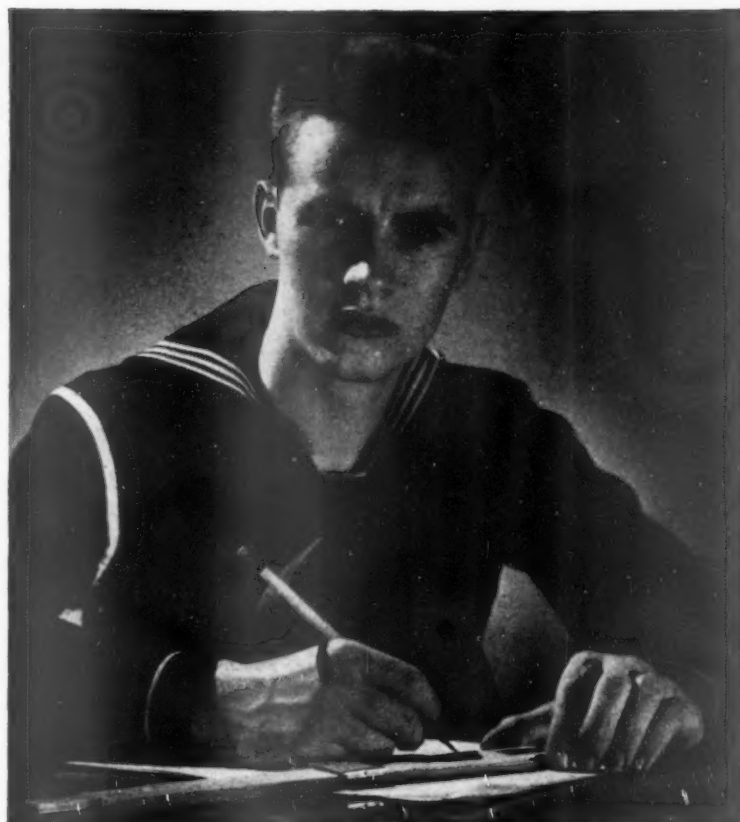
ing manufactured by the H. & A. Mfg. Co., Inc., 86-100 Leroy Ave., Buffalo 14, to heat the firing mechanisms of machine guns, hydraulic actuating mechanisms on airplanes, storage batteries in army tanks, and other military necessities that must be kept warm to operate in below-zero theaters of war. One unspecified unit, weighing only a few ounces, is said to "raise the temperature of 30-odd pounds of steel 90 degrees above sub-zero external temperatures."

Underlying the efficient operation is said to be a combination of new heating element and new methods of insulation and housing plus a means of attachment wherewith the "face of the heating plate is held in compressive, resilient contact against the surface through which the heat is to be transferred. . . . Ingeniously enough, no nuts or bolts or permanent attachments ordinarily are required; the units can be 'sprung' onto the object." Postwar applications in the fields of manufacturing equipment, transportation, home appliances, etc., are being studied.

Spark Plug Testers

Bottled carbon dioxide finds a special application in two new Spark Plug Test Stands on Wheels developed by the Airplane Mfg. & Supply Corp., 6853 Lankershim Blvd., North Hollywood, Calif. The gas is used at pressures up to 750 psi., in test chambers which simulate engine conditions for spark tests.

One stand for servicing mica plugs has a motor-driven cleaner; the other for servicing ceramic plugs has a sand-blast cleaner. Both stands are equipped with Wheatstone bridges, storage compartments for 432 plugs, large tool and parts drawers, and electric heating lamps in the storage compartments to prevent dampness, corrosion of plugs, and misleading test results.



The man behind the Future

Behind our fighting forces is the greatest production effort in the history of the world.

Behind our production effort are the men of science...engineers, designers, researchers, mass-production experts.

Behind these mechanical wizards are the engineering students...the men of tomorrow on whose shoulders rests America's industrial future...your future.

These young men...many already in uniform...are passing up their football and hockey and best girls to cram four-year engineering courses into less than two years.

They are getting behind the war effort. The things they've learned are already at work in America's planes, tanks, guns, and ships.

And behind these students...with endless patience and devotion, giving freely of their minds and hands and time...are the veteran teachers.

Also backing them are America's leading industrial organizations...taking time, though busy on war jobs, to help these youngsters foresee the use and

shape of future mechanical equipment.

Hyatt, for instance, regularly provides data of helpful interest for these knowledge-hungry engineers.

Our latest contribution is the Hyatt Engineering Handbook...a quick-reference manual containing a collection of original computations and other fundamental engineering data.

Such is the American way of getting things done, of planning ahead, of imparting knowledge to builders of tomorrow, of cultivating coming men as well as those who have arrived.

We've all got a stake in these young men. The stake is our future...America's future.

Let's give them all we've got.

HYATT BEARINGS
DIVISION OF
GENERAL MOTORS
HARRISON, N. J.

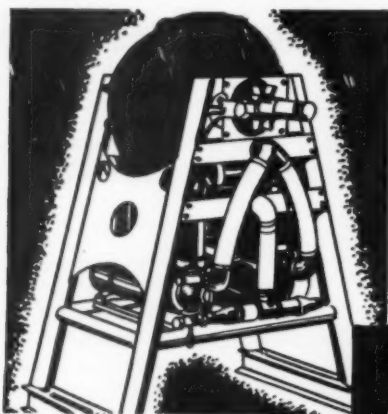
LIQUID

DYNAMITE

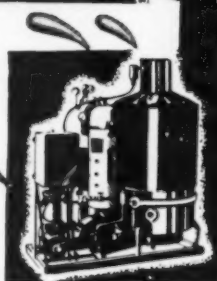
The tremendous power

locked up in each tiny drop of water, properly harnessed, compares with that of block-busters and bazookas

Constant improvement in the harnessing of this latent energy of water, so that it becomes most useful to industry and the Armed Forces, has always been the purpose of Clayton research and development. Many outstanding industrial achievements have resulted from Clayton's unique methods of utilizing water power. These developments, often departing from conventional engineering practice, now make important contributions to industry and the war effort, in Clayton equipment shown below.

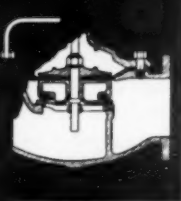
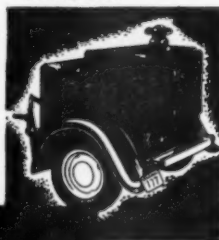


Hydraulic Dynamometers
Clayton "Turbo Closed System" dynamometers provide all the accuracy of the finest equipment available, at a fraction of the cost and from a minimum of critical materials. Sizes from 50 to 4000 h.p. Now in service in many industry "test cells".



Flash-Type Boilers
Requiring $\frac{1}{4}$ the space and weighing $\frac{1}{2}$ as much as conventional boilers, Clayton steam generators develop full working pressure in 5 minutes.

Kerrick-Kleaners
Automatically combine water with heat, detergent, and friction, to save up to 80% in man-hours in industrial cleaning jobs.



Feathertouch Valves
Harnessing hydraulic line pressure in an entirely new way, Clayton valves solve countless liquid and pressure control problems.

CLAYTON

MANUFACTURING CO.



ALHAMBRA
CALIFORNIA

WAR BUSINESS CHECKLIST

A digest of new federal regulations affecting priorities, price control, and transportation.

Increased Civilian Supply

To enable Victory gardeners to buy atomizing hand sprayers, hand dusters, wheel-type hand cultivators, and hand-plows, WPB, through an amendment to Order L-257, has lifted all preference rating requirements affecting these agricultural utensils. . . . Civilians will get more shoe repair soles in the second quarter of 1944, according to an Office of Civilian Requirements announcement that promises to repair shops sole leather at the rate of 350,000 bends (good for half soles for about 26 pairs) per month. . . . As a result of increased fat production, thanks to the glut of hogs on the market early this year, WFA has suspended restrictions on the use of glycerin for civilian needs during the months of April, May, and June. . . . Chrome stainless steel, other than that obtainable from distressed stocks, is available to flatware manufacturers for making knives, forks, dessert spoons, and teaspoons, for sale to hospitals, war plant cafeterias, hotels, and other institutional users, as a result of an amendment to WPB Order L-140-b. . . . When bowling, billiard, and other recreational facilities are needed to maintain worker morale, permission to construct such facilities may be obtained by applying to WPB on Form 617.

Relaxation of Priorities

Under WPB Supplementary Order M-1, as amended, additional uses of aluminum are permitted for products essential to the war effort. . . . Restrictions on weight of iron and steel permitted in domestic cooking appliances and heating stoves (not electric) have been removed by amendment to WPB Order L-23-c. . . . Manufacturers of wrenches or pliers and nippers may make a permitted type of either carbon or alloy steel (but not of both) except in cases where alloy steel only is specified (Amendments to Schedules II and III, WPB Order L-216). . . . A limited amount of aluminum is available to packers of food and medical products for use in making their glass container closures under WPB Order L-103-b, as amended. . . . To conserve lumber, WPB now allows the use of metal where wood was formerly required in baby-weighting scales and motor truck, portable beam, and built-in-floor scales; limitations on size, capacity, and design of these articles are still maintained (Amendments to Schedules I, III, IV, IX, WPB Order L-190). . . . By filing Form WPB-2945 by Apr. 10, manufacturers who did not use casein in the past may be allotted some, due to the improved supply situation, the Chemicals Bureau of WPB has announced. . . . Restrictions on

Realistic crystal gazing...

This is no crystal ball and the vision is no dream. Cargo by air is an accomplished fact today... and what's more it's cargo by *international* air too. Heavy capital goods are being shipped to spots on the map which were inaccessible a short while ago and it's opening new frontiers. International air transportation is one post-war plan that is far beyond the paper planning stage.

Planes of advanced design, men of real courage and the electron vacuum tube are the three basic elements that have made air transportation possible... and practical. Tomorrow, when you ship precious cargo via the air you should know that its safe arrival depends equally upon these three basic factors.

Eimac tubes have long been first choice of the airways. Their dependability, superior performance capabilities and great stamina have naturally earned this enviable position for them. Thus Eimac tubes are part and parcel of today's international air transport system just as they have long been part and parcel of domestic airways.

Get your copy of **ELECTRONIC TELEVISION** (layman's handbook of electronics)

Here's a booklet that will give you a concrete picture of the functions of the electron vacuum tube. Sixty pages crammed with instructive illustrations and plain language which describes clearly the fundamentals of Electronic Heating, Broadcasting, Television and other uses for this amazing science. A copy will be sent you without charge or obligation. Drop a note on your business letterhead.



Follow the leaders to

Eimac
REG. U. S. PAT. OFF.
TUBES

EITEL-McCULLOUGH, INC., 817 SAN MATEO AVENUE, SAN BRUNO, CALIF.

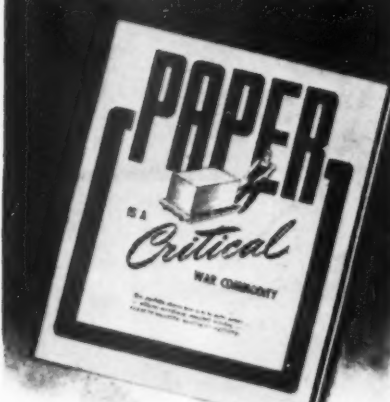
Exclusive manufacturers of Electron Vacuum Tubes and other vacuum devices used in the field of Electronics

Plants located at: San Bruno, California and Salt Lake City, Utah

Export Agents: **FRAZAR & HANSEN, 301 Clay St.**
San Francisco, California, U. S. A.



You
CAN SAVE PAPER
with
VARI-TYPER



This Timely Folder
TELLS YOU HOW

It explains how Vari-Typer saves paper, shows actual side-by-side comparisons between typewritten and Vari-Typed forms, bulletins, manuals, etc., lists examples of savings (some run as high as 716,000 sheets of paper annually), and also shows how important savings in ink, stencils, paper plates are made.

Send for your copy now. Or, if you prefer, direct a copy to the head of your printing or duplicating department. Send for as many copies as you need. There's no obligation, of course.



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NAME _____ TITLE _____
COMPANY _____
ADDRESS _____
CITY _____ STATE _____

the use of quartz crystals have been relaxed through an amendment to WPB Order M-146.

Information

To help manufacturers understand the workings of WPB's General Scheduling Order M-293, as amended, the Materials & Scheduling Office of the Operations Vice-Chairman of WPB has put out a Scheduling Primer, with text and charts explaining how delivery schedule procedures operate.

Transportation companies' questions on deferment procedures and employers' rights under Selective Service regulations are answered in a bulletin put out by the Office of Defense Transportation, Washington 25, D. C. Copies of this bulletin, designed primarily for smaller transportation operators, may be had free of charge from ODT's main office or from field representatives of the Division of Transport Personnel.

Preference Ratings

All defense orders will hereafter be rated at least AA-5, instead of A-10, as formerly, WPB has announced. Defense orders are defined as purchase orders calling for delivery to or for the account of the Army, Navy, Maritime Commission, and other government agencies concerned with the war effort or lend-lease orders. However, any outstanding ratings that were assigned before Mar. 18 that are lower than AA-5 may still be used. (Priorities Regulation 1, as amended.)

Excise Taxes


Retailers who are passing on to consumers the new 20% federal excise tax on jewelry, certain watches and clocks, fur articles, and some leather goods are given a choice of three ways in which to state the tax. OPA has ruled that all advertising must indicate the amount, by (1) showing the price plus the tax, and the total; (2) including it in the amount shown, with the notation that a 20% tax is included; or (3) by stating clearly in the layout that on certain named items the 20% excise tax is covered in the price listed. Catalogs, sales slips, price tags, and posters must also carry this information.

Protests

Protests against maximum price regulations which are based on grounds arising after the regulation is issued may, by recent OPA ruling, be filed any time after the new grounds arise; hitherto, protests had to be filed within 60 days after the grounds occurred. (Amendment 6, Revised Procedural Regulation 1.)

Corn and Corn Products

As expected (BW-Mar.25'44,p7), the War Food Administration has required country grain elevators in specified areas of five midwestern states to offer to grinders designated by WFA 35% of all present stocks and 35% of future receipts of yellow and mixed corn during each 15-day period.

ARMY

NAVY

American Type Founders, Inc.
Fitchburg, Mass.
Bigelow-Sanford Carpet Co., Inc.
Amsterdam, N. Y.
Fargo Mfg. Co.
Poughkeepsie, N. Y.
Gilman Engineering Works
Janesville, Wis.
High Standard Mfg. Corp.
Hamden, Conn.
Moore Enameling & Mfg. Co.
West Lafayette, Ohio
The Morse Instrument Co.
Hudson, Ohio
National Advertising Co.
Westminster, Md.
O'Keefe & Merritt Co.
Los Angeles, Calif.
Reece Button Hole Machine Co.
Boston, Mass.
Sillcocks-Miller Co.
South Orange, N. J.
Sturgeon Bay Boat Works
Sturgeon Bay, Wis.
Sturgeon Bay Shipbuilding & Dry Dock Co.
Sturgeon Bay, Wis.
Tanapa Marine Corp.
Tampa, Fla.

(Names of winners of the Army-Navy and Maritime Commission awards for excellence in production announced prior to this new list will be found in previous issues of Business Week.)

Terminal elevators within the set-aside area must reserve the same amounts from sources other than country elevators. If the designated purchaser does not accept the corn within 24 hours of the offer, it will be offered for sale to Commodity Credit Corp.; if CCC does not take it within 24 hours, it is released. (Food Distribution Order 96.)

The processors designated so far are Anheuser Busch, Inc., St. Louis, Mo.; Clinton Co., Clinton, Iowa; Corn Products Refining Co., Chicago, Ill.; Penick & Ford, Cedar Rapids, Iowa; Commercial Solvents, Peoria, Ill.

Tackling the problem from another angle, OPA has raised the ceiling for yellow and white dry corn milling products to compensate millers for recent increases in the cost of corn. The increase—40¢ per 100 lb. at processor levels—does not take into account any other advances in milling costs. (Amendment 9, Regulation 305.)

Iron and Steel Quotas

Manufacturers of galvanized pails and buckets, wash tubs, wash boilers, funnels, fire shovels, and storage cans for petroleum products have again been granted additional quotas of iron and steel. Contingent upon the availability of material at the rolling

mills and on other factors, these new quotas will allow production during the second quarter of 1944 at the same rate as production in the first quarter, when a supplementary allowance raised producers' permitted rates of use from 50% to 92 1/4% of their quarterly average use in the year ended June 30, 1941. (Directions 2, WPB Limitation Order L-30-a.)

Stoves

To encourage dealers to build up stocks of stoves during the spring and summer, OPA has allowed most dealers to increase inventories by 50% of their original allowance for coal or wood heaters, and by 100% for oil and gas heaters. Small dealers are provided with a special formula for raising inventories. (Amendment 7, Supplement 1 to Ration Order 9A.)

Laundry Equipment

Commercial laundries are promised some relief by a WPB program for producing \$27,000,000 of laundry equipment for the year beginning Apr. 1. Some \$10,000,000 of this equipment will be available to commercial laundries; the remainder will go to the armed services.

Rubber

Beginning Apr. 1, manufacturers of rubber footwear must cut the average weight of crude rubber and latex they use by approximately 50% per pair of shoes. (Amendment 2, Rubber Order R-1, as amended.)

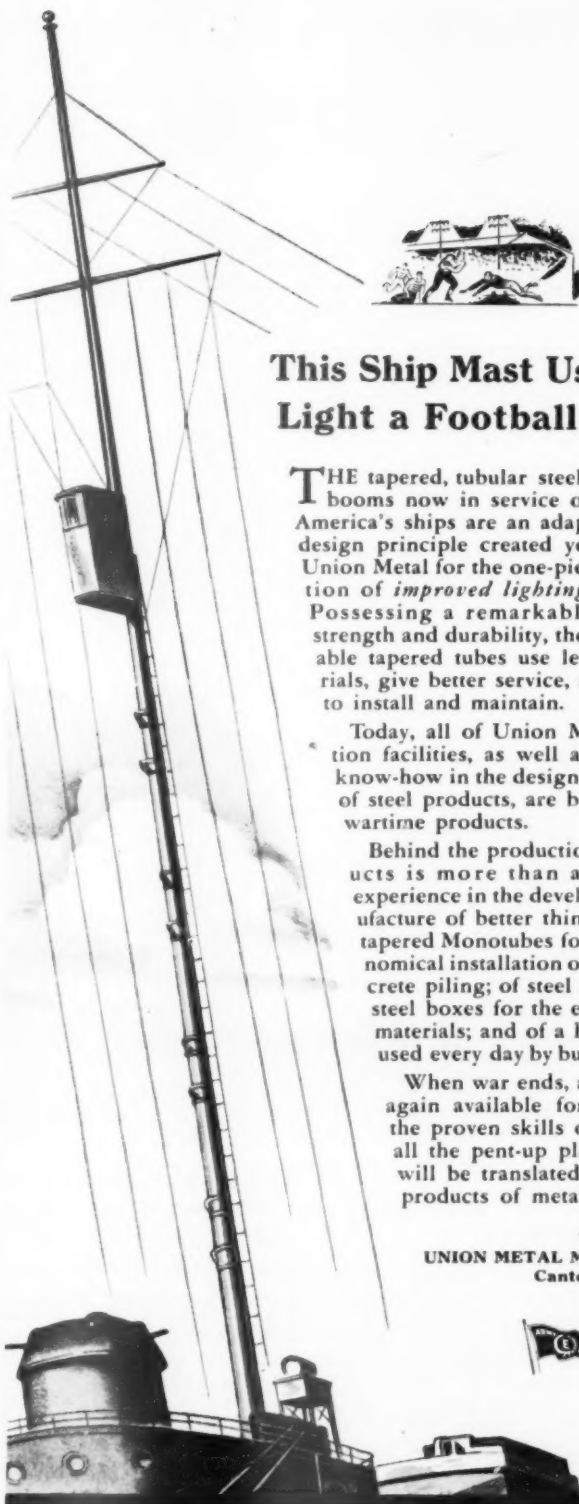
Another WPB ruling announced by the Office of Rubber Director permits Rubber Reserve Co. to release about 400 tons of balata that is beginning to deteriorate. Since this batch is not suitable for essential civilian and military products, purchasers are free to use the balata in any way they want. (Appendix III, Rubber Order R-1, as amended).

Automotive Parts

Rebuilt automotive parts, other than rebuilt motors, will be priced under a new method established by OPA to bring out replacement parts critically needed for civilian transportation. Prices, based on specific percentages of the manufacturer's original suggested retail price for the part when new, will be higher, generally, than those previously prevailing. Use of this method is optional by rebuilders who had a list price for a part before the new ruling went into effect. Manufacturers may add limited extra "emergency" costs incurred in sales under war contracts or subcontracts. (Amendment 4, Regulation 452.)

Tires

Restrictions limiting the number of tires and tubes in a dealer's inventory have been removed, though he must secure the replenishment portion (Parts B) of a consumer's tire ration certificate for each tire sold. This OPA action simplifies filing procedure by requiring only those dealers to file quarterly reports who are provided with



This Ship Mast Used to Light a Football Field

THE tapered, tubular steel masts and booms now in service on many of America's ships are an adaptation of a design principle created years ago by Union Metal for the one-piece construction of improved lighting standards! Possessing a remarkable degree of strength and durability, these light, durable tapered tubes use less vital materials, give better service, and are easier to install and maintain.

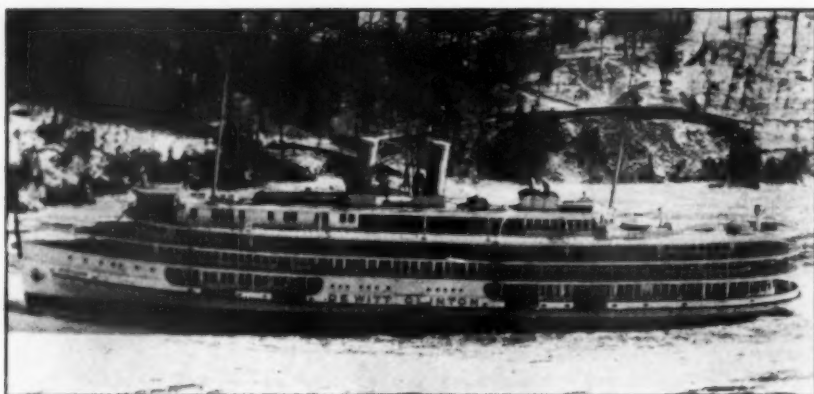
Today, all of Union Metal's production facilities, as well as its wealth of know-how in the design and fabrication of steel products, are being devoted to wartime products.

Behind the production of these products is more than a generation of experience in the development and manufacture of better things from steel—of tapered Monotubes for the fast and economical installation of cast-in-place concrete piling; of steel skid platforms and steel boxes for the efficient handling of materials; and of a host of other things used every day by business and industry.

When war ends, and our facilities are again available for peacetime use, all the proven skills of our craftsmen and all the pent-up plans of our engineers will be translated into new and better products of metal profitable to you.

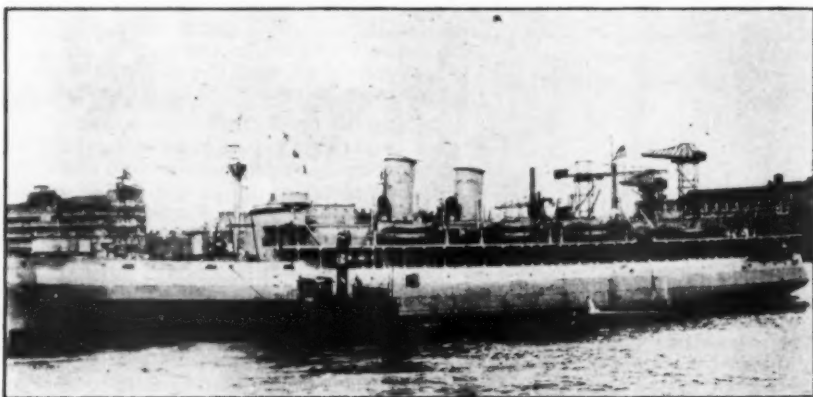
THE
UNION METAL MANUFACTURING CO.
Canton 5, Ohio

UNION METAL
Craftsmen in Steel Fabrication



VERSATILE WARSHIP

A World War troop transport that served between the wars on the Hudson River Day Line, the De Witt Clinton (above), is being reconverted into a transport for this war. Stripped of trimming and wooden superstructure, the 31-year-old 4,000-tonner is getting armor plate and a face-lifting at a Bethlehem shipyard (below). The



320-ft. craft originally was designed for a coastal passenger run but was taken over by the Navy in 1917, refitted, and rechristened the Nopatin. Under that name, it hauled 150,000 doughboys from England to France. From 1921 until taken over by the present War Shipping Administration, it carried uncounted thousands of picnickers on the excursion run between New York City and Poughkeepsie.

an inventory form by OPA. More than 70,000 reports, principally from smaller dealers, will be eliminated by this provision. (Amendment 72, Ration Order 1A.) Manufacturers of tire retreading, recapping, and repair equipment are supplied with a list of twelve types of equipment, arranged according to urgency, to guide them in filling orders. Priority must be given to the top groups, even when other items have higher preference ratings. In order of importance, recapping and repair machinery is needed for airplanes, tractors and farm implement vehicles, earth movers and road graders, trucks, and buses. Equipment having a retail value of less than \$85 is excepted. (WPB Order L-61, as amended.)

Containers

Due to increased requirements for V-boxes for military shipments, controls over shipping containers for civilian goods have been extended to include all new solid fiber-

board and corrugated cartons .045 in. or more in thickness; previously, the minimum thickness covered was .060 in. Product quotas, which allow a product a specified percentage of the new fiber shipping cartons used for the same product in the corresponding quarter of 1942, are also revised to take in several items—both food and nonfood—not included before. (WPB Order L-317, as amended.)

The War Food Administration points out that this action, as applied to the major food industries, is strictly a conservation measure and is not intended to restrict the processing or packaging of essential foods.

Machines and Parts

Sellers of industrial machines and parts whose costs have increased because their suppliers' prices have been raised under the automatic adjustment provision of the industrial machines and parts regulation may apply to OPA for permission to pass on the

increase when the article is sold to another buyer. (Amendment 112, Regulation 136.)

The price for secondhand machines and parts bought from the War and Navy departments and from Defense Plant Corp. for rental purposes may be determined either under the special pricing provision already in effect or by the method established in the general pricing provision for secondhand machines, whichever is higher. This OPA action allows a fair price on machines of considerable age, since it was found that the yearly depreciation of 8% of the original cost, formerly required, brought prices of old machines to zero. (Amendment 1, Regulation 1.)

Sugar Growers

Sugar beet and sugar cane growers, under specified conditions, are allowed ration-free use of sugar produced from their own crops, in amounts up to 25 lb. for each person in the family, or 25 lb. for each acre grown, whichever is less. This OPA order is in keeping with rationing policy on other farm-produced foods, which permits a farmer to obtain meat slaughtered from his own stock and canned goods at his own growing without paying ration points.

Other Priority Actions

Inventories of malleable iron castings are limited to a 45-day supply by WPB through Order M-21-i. . . . Amendment 6, Food Distribution Order 29, prohibits the use of cottonseed, peanut, soybean, and corn oils (or their fatty acids)—principal raw materials in the manufacture of margarine, shortening, and cooking oils—in products used for thinning or reducing paints, varnishes, lacquers, and other protective coatings. . . . All sawmills producing over 5,000 b. ft. per day of specified kinds of southern yellow pine and hardwoods are now subject to WPB Orders M-361 and M-364, as a result of amendments to these rulings. . . . Pine oil, in demand for disinfectants, has been placed under allocation, through WPB Order M-365. . . . Tighter controls over the nation's restricted glue supply are provided by a revision of WPB Order M-300 and revocation of Order M-367; Order M-368, recently issued, is also amended to increase the flow of domestic raw materials to glue manufacturers. . . . As a result of an amendment to WPB Order L-89, controlling the manufacture of elevators and elevator parts, production of escalators is henceforth subject to this order.

Other Price Actions

Dollar-and-cents increases in ceiling prices for cordwood produced in the South, to match recent increases in pulpwood prices, are put into effect by OPA through Amendment 42, Regulation 348. . . . Maximum prices on binder twine which were in effect last year are continued through the year 1944 by an extension of OPA Regulation 360. . . . Amendment 6, OPA Regulation 109, provides new, somewhat higher prices for rough and finished aircraft lumber less than one inch thick.

NEW ABRASIVE

a "Gift" to Centerless Grinding—



AIRCRAFT
NORTON
GRINDING

Grinding jobs like this thin-wall cylinder of heat-sensitive steel are critical operations. In aircraft production tolerance limits are measured in tenths of thousandths and the steel itself must not be injured. The selection of the grinding wheel is an important matter—the selection of the abrasive and the grain size, grade, and structure.

A new abrasive recently announced has proved near perfect for grinding wheels employed in centerless grinding in the production of airplane parts because of its cool-cutting properties. It is known as 57 Alundum. It has met with so much success since its introduction in war industries, particularly aircraft, that the entire production has been frozen for this important work. Now, enlarged facilities have made 57 Alundum available for any plant that can use it. This is an important announcement, and you should not let it pass unnoticed.

NORTON COMPANY, Worcester 6, Mass.

Photo courtesy North American Aviation, Inc.

Behr-Manning, Troy, N. Y., is a Norton Division

NORTON ABRASIVES



Are you being measured for a strait jacket?

Just a moment, Mr. Office Manager, before you place the order! Strait jackets may seem appropriate—in certain confused, wartime offices—but a plain business suit looks better. Yes, we know what strain you're under, with inadequate space and equipment, overcrowding of wartime personnel. But, before you order that jacket without buttons, consult—

ART METAL'S

"MR. EXPEDITER, O. D."

His "O. D." means "Doctor of Offices". His mission is to bring order out of confusion. Of course, he's a bit

hampered today by lack of equipment that isn't being made during the war. But, none the less, he's full of ideas for making war-tangled offices work more efficiently and inexpensively.

And if postwar layout is one of your problems, Mr. Expediter is a man in a million. Ask him over for a talk. No obligation. He'll leave a copy of Art Metal's little memo folder "Things to be done when you move your office," if you want it. Simply call your nearest Art Metal branch or dealer, or write to Art Metal Construction Co., Jamestown, New York.

ART METAL STEEL OFFICE EQUIPMENT

BALTIMORE
BOSTON
CHICAGO

CINCINNATI
CLEVELAND
DETROIT

*WABASH FILING SUPPLIES

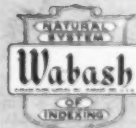
a subsidiary company



POSTINDEX VISIBLE RECORDS

HARTFORD
LOS ANGELES
NEW YORK

PHILADELPHIA
PITTSBURGH
WASHINGTON



SYSTEMATIZED EQUIPMENT AND RECORDS FOR BUSINESS

FINANCE

(THE MARKETS—PAGE 114)

Boom in Stocks

New corporate issues keep Wall Street busy. Registrations indicate growing optimism over the postwar outlook.

Public offerings of new corporate securities in the first two months of 1944 exceeded \$319,000,000, giving Wall Street's underwriting trade the second best January-February period since 1937. This is a significant total, since the Fourth War Loan drive virtually halted private financing from Jan. 15 to Feb. 15.

• **Stock Financing Expands**—Of great significance, however, is the optimism of corporate executives concerning the postwar outlook as reflected by substantial expansion in preferred and common stock financing. Investment bankers in the two months offered publicly well over \$60,000,000 of stock in both large and small companies.

Exercise by stockholders of rights to subscribe to new shares brought the grand total to over \$90,000,000, a new high for January-February stock financing since 1937.

• **Further Savings**—There are a number of reasons for the growing popularity of stocks as a financing medium. A potent fact is that issuance of stock broadens the invested capital base of a concern and, in these times of high earnings and taxes, makes possible savings which substantially reduce financing costs. Also, market conditions have been so favorable lately that the cost of securing capital through preferred stock issues is quite low in comparison with recent years.

What is more important, most corporations want to be ready to go ahead on their own when the war is over, even though government aid for reconversion is expected to be available.

• **Improving Capital Position**—In the January-February period, most of the preferred stock issues carried 4½% to 4½% dividend rates, a good indication of the better type of the average borrower coming into the market. A significant amount (almost 30%) of the proceeds from the sale of both preferred and common stocks went to strengthen working capital positions.

Also, many of the preferreds were of the type convertible at holder option into common shares at prices well above

present levels of the latter. This means that any general advance in the stock market from here on should provide for the automatic retirement of the new issues either through voluntary conversion into common or by forcing such conversion at a propitious time by call of the shares.

• **Refunding Issues**—Recent outstanding offerings included the big Michigan Consolidated Gas Co. and Oklahoma Natural Gas Co. refunding operations, together totaling \$56,000,000 of bonds and 220 shares of preferred stock. March corporate offerings came to around \$90,000,000.

April should find the new issues market active again, judging from offerings already registered with the Securities & Exchange Commission.

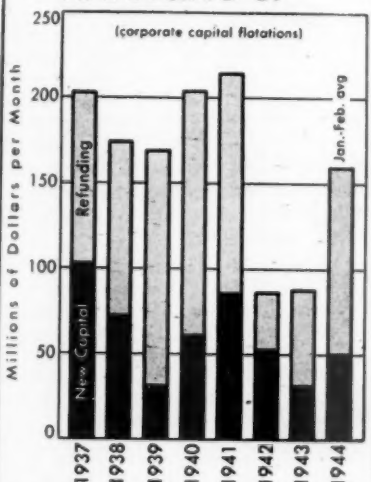
• **Many Registrations**—These offerings include:

Allis-Chalmers Mfg. Co.—\$29,600,000 convertible preferred, with around a 4% dividend rate, to retire present 4% bonds and secure some \$14,000,000 of new working capital. (Offered to stockholders first.)

American Optical Co.—230,000 shares common; 167,000 shares to represent new financing to augment working capital.

Arizona Edison Co.—\$2,500,000 3½%

FINANCING UP



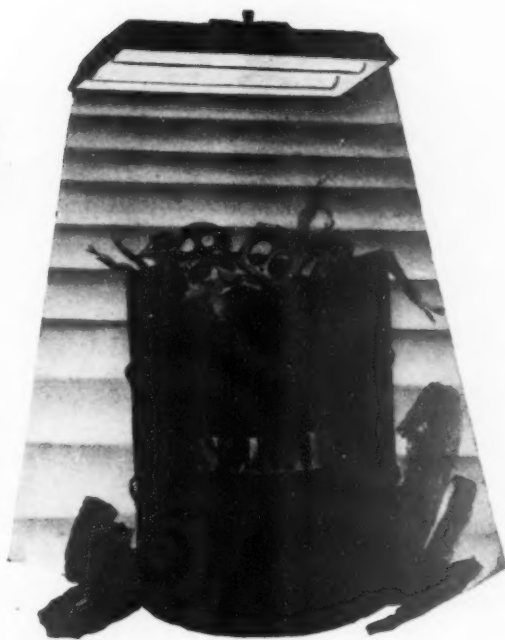
January-February volume of new financing gave 1944 the best possible start in many a year. Most encouraging has been the growth seen thus far this year in "new money" issues. Also, the rising volume of preferred and common stock financing by both large and small corporations is a favorable factor. However, war developments could, without any previous warning, quickly change the present receptiveness of investors.



**REDUCE
SPOILAGE**

with G-E Watch Dog STARTERS

REG. U.S. PAT. OFF.



Is spoilage in your plant becoming a problem? Then check the condition of your lighting system. Blinking and flickering of dying fluorescent lamps irritate war workers and impair the quality of their workmanship. Today that's serious! Eliminate annoying blink once and for all by switching to General Electric's new line of Watch Dog Fluorescent Starters.

THE WATCH DOG STOPS 'EM COLD

When a lamp reaches the end of its useful life, blinking and flickering start but the Watch Dog stops 'em cold. This manual reset starter cuts itself out of the circuit by eliminating all flow of current. Dead lamps are prevented from being started needlessly, current is saved, ballast is safeguarded and starter life is prolonged. All this adds up to less maintenance time when manpower is at a premium.



FS-100 for 100-watt lamps

FS-40 for 40-watt lamps

SEND FOR FREE CATALOG

The G-E Fluorescent Accessories Catalog tells how to use fluorescent accessories for best lighting results. Send your request to Section G-242-9, Appliance and Merchandise Dept., General Electric Co., Bridgeport, Conn.

BUY
WAR
BONDS
★

GENERAL ELECTRIC



Buy MORE WAR BONDS TODAY— For a Better Tomorrow



Buy more and more War Bonds right now, so that when Victory is won, speeded by your purchases, you will be ready to have Gaylord work with you on your Postwar packaging plans.

For your new items, or for your present line, Gaylord will have new papers, new containers, new printing processes, that will help you to sell more goods and reduce your packaging costs at the same time.

Count on buying War Bonds now — count on Gaylord to work with you in solving your Postwar packaging problems.

GAYLORD CONTAINER CORPORATION **General Offices: SAINT LOUIS**

CORRUGATED AND SOLID FIBRE BOXES
FOLDING CARTONS . . . KRAFT GROCERY BAGS AND SACKS . . . KRAFT PAPER AND SPECIALTIES

New York • Chicago • San Francisco • Atlanta • New Orleans
Jersey City • Seattle • Indianapolis • Houston • Los Angeles
Oakland • Minneapolis • Dallas • Jacksonville • Columbus • Tampa
Fort Worth • Detroit • Cincinnati • Des Moines • Oklahoma City
Portland • Greenville • San Antonio • Memphis • Kansas City
Milwaukee • Bogalusa • Weslaco • St. Louis • Hamden • Appleton

bonds and 4,500 shares of \$5 preferred, refunding operation.

Celanese Corp.—350,000 shares \$4 preferred publicly and 139,622 shares common to stockholders; to retire present 7% and 5% preferreds and use rest of proceeds to finance \$25,000,000 plant expansion program. (Already paying common dividend in stock to conserve cash.)

Champion Paper & Fibre Co.—\$2,550,000 preferred 6% to finance contemplated capital expenditures.

Consolidated Cigar Co.—\$4,000,000 4½% shares to refund present 6½% preferred.

Elliott Co.—\$3,000,000 preferred 4½% to refund two present issues and secure \$700,000 to purchase facilities now leased from Navy.

Katz Drug Co.—\$1,500,000 of 4% debentures to retire bank loans and get \$700,000 of new working capital.

Louisiana Power & Light Co.—\$17,000,000 bonds to replace \$17,500,000 outstanding 5% first mortgage bonds.

Miller Mfg. Co.—\$9,500,000 \$5 Class A shares to finance acquisition of control of Rieke Metal Products Co. and secure \$700,000 cash.

Minneapolis-Honeywell Regulator Co.—\$3,000,000 preferred 4% to provide new working capital.

Northwest Airlines, Inc.—117,460 shares of common (offered first to stockholders) to secure over \$1,800,000 of new working capital. Unsubscribed portion will be sold publicly.

Sprague - Warner - Kenny Corp.—\$1,500,000 of 6% preferred; to use part to complete merger with Western Grocer Co. (BW—Feb. 5'44.p.53); to offer remainder publicly to retire present 6% stock. Also selling privately, probably to Commercial Credit Co., \$3,250,000 of instalment notes.

• **Others Not Registered**—Likely candidates for additional April offerings, although the issues have yet to be registered, include:

Atlantic City Electric Co.—\$5,500,000 preferred, refunding operation.

Bond Stores, Inc.—\$6,000,000 preferred to retire a \$2,100,000 mortgage and provide \$3,900,000 cash.

Mengel Co.—\$2,500,000 of new debentures to refund present 4½% and add \$1,000,000 to working capital.

National Container Corp.—\$4,500,000 of 5% debentures to take care of costs of recent acquisition of Bedford Pulp & Paper Co. and secure some \$1,500,000 new capital.

• **Other Possibilities**—Still in the conversation stage are the following new issue possibilities:

A. E. Staley Mfg. Co.—\$5,000,000 of 3% debentures to retire present 2½% and provide some \$3,000,000 cash for contemplated postwar and plant modernization programs.

Schenley Distillers Corp.—\$65,000,000 financing, including public offering of sufficient securities to refund \$28,000,000 of 4% and 5½% preferred outstanding.

Youngstown Sheet & Tube Co.—To ask stockholders to authorize issuance of new convertible obligations in the event it decides to refund \$15,000,000 of 4% com-

Wartime Report of the Pennsylvania Railroad

SUMMARY OF 97th ANNUAL REPORT which was mailed to stockholders at the end of February. Operating revenues increased \$141,298,532 over 1942. Operating expenses increased \$109,369,984. Taxes increased \$55,826,689, or 44.8% over the previous year. Net income was \$85,418,484, a decrease of \$16,050,309.

THE YEAR 1943

The war continued to dominate the ever increasing transportation effort. While performance was highly satisfactory from the standpoint of meeting every demand of the war emergency, it could not of necessity be wholly adequate from the standpoint of the character of the service performed, particularly the passenger service. Nevertheless, considering the abnormal conditions that prevailed throughout the year, the results as a whole can be viewed as a creditable achievement.

THE NATIONAL EMERGENCY

The ability of the railroads to handle this record volume of traffic was due to further improvements in facilities and operating methods; to splendid cooperation between the railroads, the shippers and employees, the Army and Navy, and other agencies of Government, and to the continued helpful attitude of the Office of Defense Transportation.

TAXES

Sound public policy not only justifies but should require the accumulation by the railroads of large post-war reserves to meet post-war changes in transportation practices and methods, but the tax policy of the Government is heading

them along the same unfortunate path as at the close of the last war, when the railroads had to borrow large sums of money and go into debt to revamp their properties.

Today, while the railroads are doing the largest business in their history, it would be advantageous not only to them, but also to the public at large and to railroad employees as a whole, if the tax laws were amended so as to permit the creation now of the reserves needed for post-war rehabilitation, with resulting greater employment in the post-war period.

THE EMPLOYEES

The Board takes pleasure in acknowledging the continued efficiency and loyalty of the employees, which made possible the handling of a volume of traffic exceeding that of any year in the history of the Company.

44,448 employees of the System have entered the Armed Forces, serving in every part of the world, of whom 123 have made the supreme sacrifice.

Many thousands of new employees have had to be trained to take their places, including 21,730 women who are now in the railroad service.

Never were the demands upon the employees so great; never have they met the burden more efficiently and more courageously.

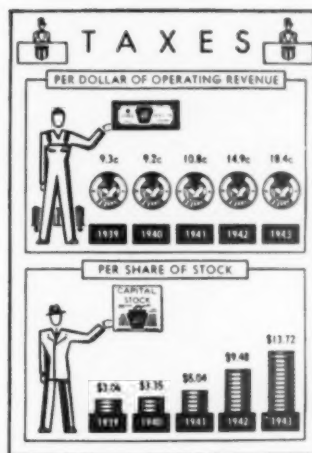
M. W. CLEMENT, President

OPERATING RESULTS

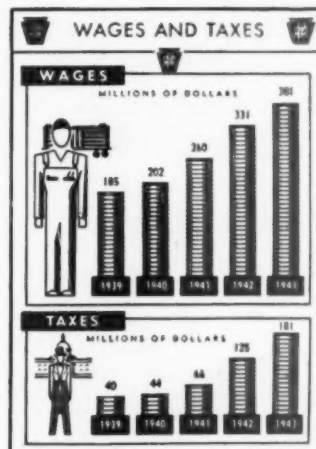
	1943	Comparison with 1942
Operating Revenues	\$979,773,155	I \$141,298,532
Operating Expenses	663,510,711	I 109,369,984
Net Revenue	316,262,444	I 31,928,548
Taxes	180,405,491	I 55,826,689
Railway Operating Income	135,856,953	D 23,898,141
Hire of Equipment and Joint Facility Rents	8,310,542	D 6,166,208
Net Railway Operating Income	127,546,411	D 17,731,933
Non-Operating Income, chiefly dividends and interest on securities owned	42,503,518	I 1,406,637
Gross Income	170,049,929	D 16,325,296
Fixed Charges, chiefly rentals paid to leased roads, and interest on the Company's debt	84,631,445	D 274,987
Net Income	85,418,484	D 16,050,309
Appropriations to Sinking and Other Funds, etc.	1,924,119	D 794,112
Retirement of matured Debt—Penna. R. R. Co.	17,311,000	D 13,069,000
(Does not include \$28,425,431 of matured debt of leased lines retired)		
Dividend of 5% (\$2.50 per share)	32,919,385	
Transferred to credit of Profit and Loss	33,263,980	D 2,187,197

THE PENNSYLVANIA RAILROAD
Serving the Nation

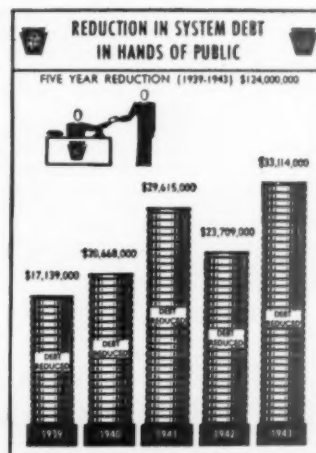
BUY UNITED STATES WAR BONDS AND STAMPS



Taken as a whole—taxes—the Company's chief burden, amounted to 18.4 cents out of each dollar of operating revenue, the equivalent of 27.4% upon the Capital Stock, or \$13.72 per share, an increase of \$4.24 per share over 1942.



Recent wage increases, together with vacations with pay, based on present force, are estimated to increase the expenses of the Company by approximately \$45,000,000 annually.



During the last five years, there has been a net reduction of \$124,000,000 in the debt of the System in the hands of the public.

Property Facts Will Help..



The AMERICAN APPRAISAL Company

CONSULTANTS IN PROPERTY ECONOMICS

WANTED: PRODUCTION PROBLEMS IN METAL PARTS FABRICATION

• Can you profit by assistance that covers design, engineering, machining, plating, finishing, assembly and inspection of metal parts?

With almost 50 years of experience on its own metal products, plus wartime production of precision materiel, using modern equipment and expert operators, The Todd Company, Inc., can assure you of skillful, economical fulfillment of contracts or sub-contracts.

The new Todd method of machining magnesium, increasing output 400%, won the highest WPB award. Excess production capacity puts our long experience with magnesium, aluminum and the heavier metals at your command.

Write for names of companies we have assisted and our free booklet, "Experience and Skill at Your Service."

Todd
COMPANY, INC.

ROCHESTER NEW YORK
OFFICES IN ALL PRINCIPAL CITIES

STOCKS—LAST WAR AND THIS ONE



Thus far, in this war the stock market has produced no replicas of the spectacular 1915-16 crop of war babies. Instead, the going has been much tougher for investor and trader alike, with any profits garnered from stocks also reduced sharply by today's higher tax rates. In the last conflict, however, the rally from earlier-established "war lows" started less than a year before the armistice and had not prog-

ressed far when hostilities ceased. This time, a similar rally has been under way for almost two years, though the war's worst period may possibly still be ahead. It is because of that factor that many Wall Streeters now fear present market levels may prove vulnerable subsequently in the event of any temporarily disturbing war development that might occur this spring or early summer.

vertible debentures, or if it needs additional funds for reconversion.

Artloom Corp.—Considering new financing to obtain more working capital and cash for new machinery purchases.

• **Public Is Receptive**—That the public now has plenty of funds available for investment in securities that appear particularly attractive has been well confirmed by the excellent reception given various recent new stock and bond offerings. Most gratifying to Wall Street in this connection is the successful completion last week of the largest secondary offering ever undertaken, the liquidation by Allegheny Corp. of 704,121 shares of its holding of Chesapeake & Ohio common to secure funds for debt retirement.

• **Watching the War**—However, underwriters are keeping a close watch on the war situation since developments there could change radically and quickly the present favorable market for new issues.

FORTUNES OF WAR

When directors of Colt's Patent Fire Arms Mfg. Co. last week voted to omit the dividend payment normally due at the end of March, their action had more

significance than could be attributed merely to the first interruption in the company's dividends since 1917.

Omission of the dividend presented the first graphic illustration of how quickly—with little advance warning to stockholders—the fortunes of companies engaged exclusively in war work can change.

So unprepared were Colt stockholders that, because of dumping of shares by timid holders, market levels for the stock on the New York Curb Exchange within a few hours after the announcement had fallen over \$8 to around \$39.

According to the company, its 1943 operations as a whole were moderately profitable, largely because of earnings in the first six months of the year. Production later dropped so sharply, because of the reduced need of the military forces for small arms and munitions, that operations in the last half ran up a sizable deficit.

Directors reported that January-February preliminary figures did disclose some improvement but by no means a complete reversal of the earlier showing.

Consequently, the management decided not to pay out any liquid assets for dividends now.

Rails Slump

Most roads report decline in February earnings despite an over-all revenue increase. Net of Pennsylvania is an exception.

Aided a little by leap year's extra day, February revenues of Class I railroads, according to Assn. of American Railroads estimates, were some 9% ahead of 1943. Freight revenues increased about 6%, and passenger traffic receipts jumped more than 26%.

• **But Earnings Drop**—Nevertheless, most of the early reports on individual roads are disclosing a very different picture in regard to earnings.

As in January when operating cost increases alone exceeded the 9.3% gross revenue gain, most carriers' February operations probably will show substantial drops in earnings after all taxes and charges.

• **Sharp Contrast**—Of the eastern trunk lines, for example, New York Central (one of the relatively few carriers to report better earnings in 1943 than in 1942) reported earnings of \$2,842,000 after taxes and charges, in sharp contrast with its 1943 February net of over \$6,000,000. Central's net for the first two months was \$5,698,000, compared with \$10,711,000 for the corresponding period last year.

February net income of the Baltimore & Ohio was off 47%. Its January-February profits of \$2,739,000 disclosed even a greater decline percentage-wise.

• **Transcontinentals Off**—Net operating income of Atchison, Topeka & Santa Fe, Southern Pacific, and Union Pacific disclosed a combined drop of 29% in February over 1943 and in the first two months a drop of around 27%. Illinois Central's February earnings declined over 30%.

In the Southwest, the Texas & Pacific reported a 27% drop in its February net, plus a 30% falling off in its January-February profit. Reading Co., Pennsylvania anthracite and bituminous carrier, disclosed almost 25% declines in net operating income for both those periods.

• **Few Increases**—There were some systems, however, which disclosed better than average performances. The nation's largest railroad, the Pennsylvania, reported a February gain in net operating income of \$2,027,000, compared with the \$1,367,000 drop it registered in the first month of 1944.

Also, the Louisville & Nashville and the Southern Ry. showed little change this year in comparison with 1943 January-February operations.



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Rates*

Now in Effect

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SAVE time for overburdened post offices and avoid confusion by giving your mailroom personnel these new Postal Rates, effective March 26.

- **FIRST CLASS LOCAL MAIL**—Old rate of 2c per ounce increased to 3c.
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- **PARCEL POST AND OTHER FOURTH CLASS MAIL**—Old rates increased 3%, or 1c, whichever is greater.
- **MONEY ORDERS, C.O.D., REGISTERED and INSURED MAIL**—Fees increased.

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LABOR

Draft Act Tested

Court order granting idle pay to veteran denied his old job sustains right of returning G.I. to full reinstatement.

Section 8B of the Selective Training & Service Act of 1940 provides that if an honorably discharged war veteran is drafted from the "employ of a private employer, such employer shall restore such person to such position or to a position of like seniority, status, and pay unless the employer's circumstances have so changed as to make it impossible or unreasonable to do so."

• **Postwar Policy**—The draft law was conceived as a statement of postwar policy. It was generally assumed that a court, meeting in peacetime, would decide whether Sec. 8B was pious sentiment or had the force of law. But for well over 1,000,000 men, the war is over. Discharged from the ranks, they have come home. To them, and to their former employers, the legal standing of Sec. 8B is of immediate concern.

One of the returning million was Robert Hall who returned to Covington, Ky., after 38 days in an Army camp bearing papers which attested to his honorable discharge. An employee of the Union Light, Heat & Power Co. for nine years before induction, Hall asked for his job back and was refused. • **Balked on Wages**—Hall hired a lawyer, went to court to determine his rights. Three and a half months later, the utility company put Hall back to work, but the litigation, which also involved a claim for wages during his idleness, proceeded. Last week, the U. S. District Court for the Eastern District of Kentucky backed Hall up all the way, and 8B won an important court test.

The employer contested the suit chiefly on two grounds. The company contended that the court had no jurisdiction to decide a case in which recovery of wages was asked when there was no suit to obtain restoration of employment. It also claimed that the words "impossible or unreasonable" are so indefinite in determining an employer's responsibility that this section of the statute is unconstitutional.

• **"Mockery" to Congress**—The court swept these arguments aside with forth-



LABOR TRUCE

With New York's Mayor La Guardia as referee, Howard McSpedon (left), head of Manhattan's A.F.L. Building & Construction Trades Council, and Joseph Curran, chief of the C.I.O.'s city organization, sign a pact to settle

jurisdictional rows via a joint committee. Urged by Mayor La Guardia to assure noninterruption of building during an expected postwar construction boom, the pact affects not only 750,000 workers but a small army of contractors previously caught in the middle of interunion fights.

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WEBSTER ELECTRIC Teletalk Compensates for Empty Desks

An epidemic of empty desks is abroad in the land. Every executive is face to face with the urgent need of doing more work . . . with less people to do it.

Teletalk Amplified Intercommunication is going a long way to increase the productive time of executives everywhere by giving them quick, easy and personal contact with every department of their business. With Teletalk they can flip a convenient key and ask for production figures, check on orders, direct every detail . . . without leaving their desks.

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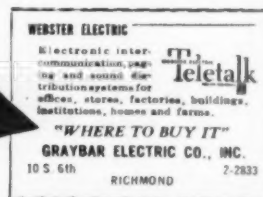
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Next time you use a piece of rope—if you *do* use rope—handle it with the right kind of care. Treat it right to make it last as long as possible. And, help us spread the story of ROPE CONSERVATION—write for free copies of the W. P. B. sponsored booklet, "The Rope You Save Fights For You!" Plymouth Cordage Company, North Plymouth, Massachusetts and Welland, Ontario.

PLYMOUTH

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• TYING TWINE



right language. It declared that "to recovery . . . could defeat the whole purpose of the act and make a mockery of what Congress intended." The whole context of the statute and the purpose for which it became the law, "ruled the court," was to minimize, insofar as possible, the sacrifices of those who were required to enter the military service by assuring them that their jobs, their pay and their status with their employers would be held inviolate."

Addressing itself to the terms "impossible or unreasonable," the court stated that "the terms used are not so vague or indefinite as not to be reasonably understood by reasonable people." So saying, it ordered a \$512 reimbursement for Hall and cleared the way for an examination of 8B by a higher court.

Mahon's Militants

Trolley and bus union—enjoying big wartime expansion—is arousing government ire with its resort to strikes.

Statistics on wartime strikes are faulty, and tabulations by unions involved don't exist. Consequently, it would be difficult to adduce proof that one union, rather than another, is the foremost violator of labor's no-strike pledge.

• **Carmen Near Top**—But taking number of strikes rather than number of men involved or number of man-days lost as the measuring rod, A.F.L.'s Amalgamated Assn. of Street, Electric Railway & Motor Coach Employees of America would be close to the top, if it was not indeed No. 1 in such a listing.

When a vast labor organization like the miners or the steel workers takes the no-strike pledge lightly, results are immediate, dramatic, and of national interest. But a tieup of Cleveland trolley cars (BW—May 8'43, p98) or a bus stoppage on the Birmingham-Atlanta route (BW—Jan. 1'44, p78) gets little more than local attention. This, despite the fact that something like the Los Angeles transit strike lasting 24 hours (BW—Jul. 31'43, p88) can knock work schedules at vital war plants higher than a P-38's effective altitude.

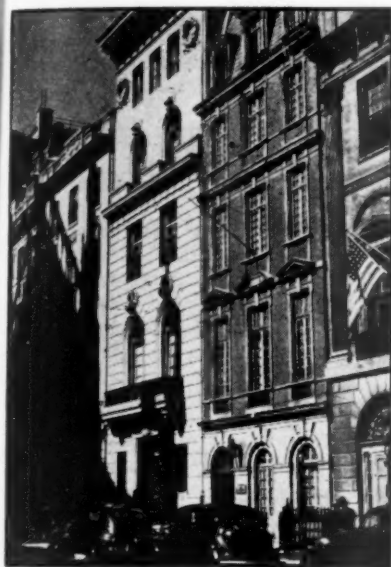
• **Little Public Discredit**—Perhaps because it is relatively small as unions go (150,000 members in 460 locals), perhaps because a major share of the employers it deals with are municipal governments always eager to stay on good terms with organized voters, its strikes have brought the Amalgamated no great public discredit. Its 84-year-old patriarchal president, W. D. Mahon, is an obscure citizen of Detroit, where his

union maintains headquarters. So far as it is known, he has never been caricatured as another John L. Lewis. Like the carpenters' union in the World War, the Amalgamated has done well for itself by operating as if its parent body had never made a no-strike pledge. Just since last summer it has chartered 25 new locals, written many new closed-shop contracts, and expanded its membership 20%. But this week it looked as though it might have overreached itself.

• **Three Strikes**—Government officials whose job is to keep peace on the labor front were struggling with the backwash of three Amalgamated strikes, were beginning to mutter that someone should tell the story of Mahon's militants. Their headaches were:

(1) A week-long tieup on Pennsylvania Greyhound lines radiating out of Pittsburgh involving about 500 drivers, terminal workers, and maintenance men, a stoppage that began as a three-day union meeting—not a "strike"—when two employees were laid off.

(2) A strike of Tri-State Transit Co.



UNION MANOR

Into New York's swank 51st St. off Fifth Ave. has moved the C.I.O.'s United Electrical, Radio & Machine Workers. Sandwiched between the establishments of a diamond merchant and a collector of rare books, the union's new national headquarters (above, white building) originally was the \$300,000 home of the late William K. Vanderbilt. The union purchased the property for \$60,000, will spend \$10,000 for improvements.

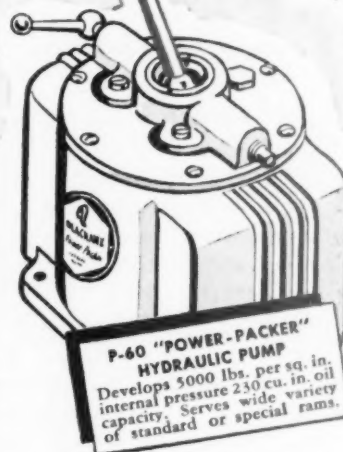


Presidents Often Give This Their Personal Attention

So important do top executives consider the added utility and sales appeal given their products by Blackhawk Hydraulic Power-Packer that they often ask us to explain its applications, advantages and cost to them personally. Easier, safer, more accurately controlled operation, with extra speed and new comfort for the operator, are only a few of the reasons why hundreds of manufacturers of equipment have improved their products with Power-Packer. Wherever controlled force must be applied to an operating part, Blackhawk Power-Packer can be used to advantage.

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SNOW FLOWS	Raise plow blades
GANG MOWERS	Control sickle arm and raise mowers
TROLLEY BUS LIFT	Raise trolley
HIGH-PRESSURE TESTERS	Build fluid pressure
AVIATION JACKS	Raise plane
LIFTING CRANES	Clutch control
ROAD GRADER	Blade control and steering
SCARIFIER	Raises scarifier teeth
ROAD RIPPER	Raises ripper teeth
ROTARY TILLER	Adjusts tiller depth
PRESSES	Hydraulic Power
ROTARY BROOM SWEEPERS	Raise broom



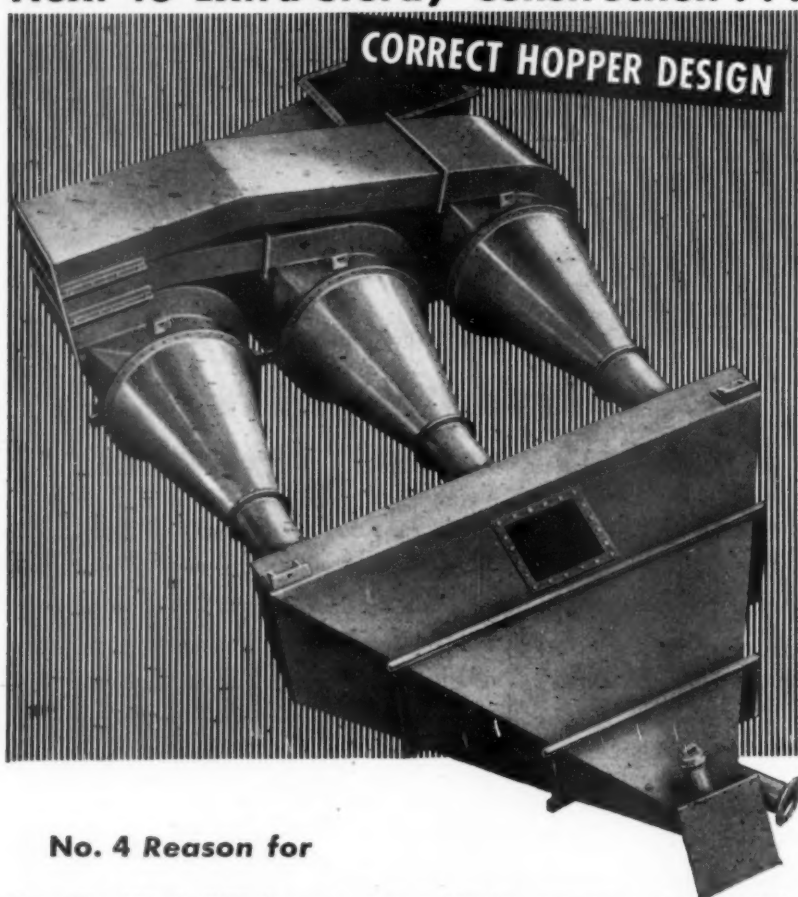
Ready to Install

The "Power-Packer" Hydraulic Pump can be furnished with standard rams—or with special rams, tailor-made for your product. Blackhawk is also the source for power-driven hydraulic pumps. For information on hydraulic controls for your future product designs—or present hydraulic applications write Blackhawk Mfg. Co., 5300 West Rogers Street, Milwaukee 1, Wisconsin.

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DESIGNED TO DO A JOB, NOT JUST TO MEET A "SPEC"

lines, affecting Trailways Bus operations in nine southern states. For their walk-out, some 400 Amalgamated members blamed National War Labor Board slowness in deciding their wage claims.

(3) A Boston & Maine Transportation Co. strike of 200 which lasted only a couple of hours but managed to disrupt bus travel between Boston and Portland, Me. The reason given for this dispute was disagreement over overtime pay rates.

•**Strike Procedure Ignored**—The story of Mahon's militants is simple, stereotyped. The Amalgamated, in common with many old-time A.F.L. unions, has a constitution which provides that no local can strike without an approving vote of two-thirds of the local membership and sanction of the general executive board. Strikes outside this procedure are illegal, locals engaging in them are to be expelled according to Amalgamated law. But Mahon's general executive board gives no sanction, does no expelling.

Until the Penn Greyhound tieup, the Amalgamated excuse was that the strikes were so short the executive board had no time to act. The Penn strike, however, was going into its second week before it ended in the field. Mahon and his board had taken no action.

NEW ALLY FOR FEPC

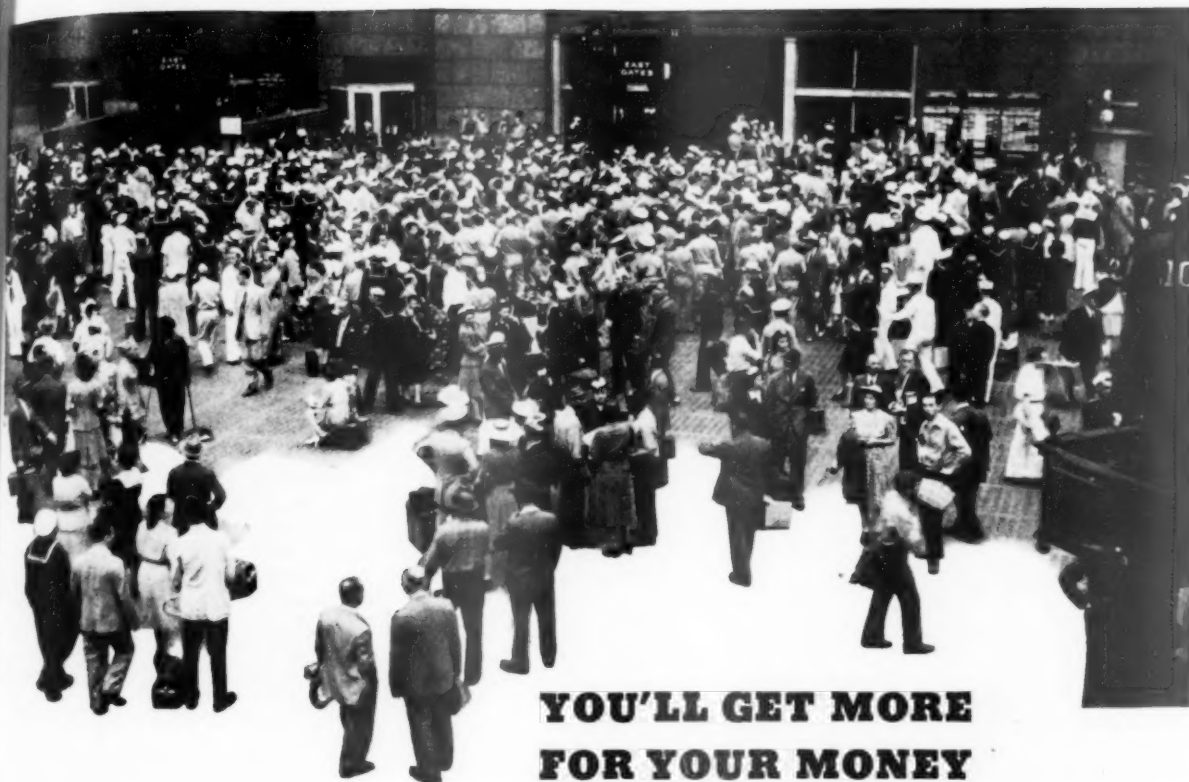
The President's Fair Employment Practices Committee has found an ally in its uphill battle against racial discrimination in American industry—a battle in which its antidiscrimination orders have been received with wholesale defiance and precious little acceptance.

Evidence of the new alliance came to light last week when the War Manpower Commission office in southern California lifted the AA priority rating of the Los Angeles Railway Co. for referral of new workers by the U. S. Employment Service.

WMC acted on complaint of FEPC, and of the C.I.O. in Los Angeles, that the traction and motor coach firm had refused to hire Negroes and Mexicans referred by USES to fill vacancies on its operating staff, and thus allowed its working force to shrink. WMC's position was that the company did not make sufficient use of the priority to warrant continuance.

A spokesman for FEPC said the company was willing to hire workers of any race but feared a retaliatory strike of the kind which interrupted operations two years ago when two Negro laborers were advanced to higher ratings.

FEPC ran into the same obstruction at the Philadelphia Traction Co. (BW-Jan.15'44.p95) and on the southern railroads (BW-Jan.8'44.p101).



**YOU'LL GET MORE
FOR YOUR MONEY**

... After the War

More passenger comfort is the railroads' chief concern as they plan for the future

What are railroad executives planning for after the war? Pullman-Standard wanted to know so we asked them—in a series of personal interviews with 58 top officials of 39 leading railroads. Their opinions are assembled in a thorough, carefully analyzed report—part of Pullman-Standard's continuous study of how to improve transportation.

These men talked freely, interestingly, about the trends of service. They are studying how to get more speed—*how to give you more for your money*. They are planning how to give you greater seating comfort and improved lighting—more efficient for your reading. They are thinking about better toilet conveniences and smoking facilities; about attractive interiors and increased recreation opportunities; about sound insulation and air

conditioning; about how to handle luggage and where to put it; about added niceties of personal service. Many of them mention specific facilities already installed on crack trains built by Pullman-Standard as ideal solutions of these problems.

Summing it up, these men are planning *how to increase your comfort*; and they unanimously agree on post-war lightweight trains embodying these added travel comforts.

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To give you greater comfort, Pullman-Standard is not simply studying that subject, but is doing something about it. The report's ideas and suggestions are now being translated into practical designs for the Railroad Equipment of Tomorrow: Lighter, faster, more economical to operate, more comfortable and—first, last, always—safe.

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Gunmaker...



and Food-Packer...

to the man with the
new-product headache:



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Today, the roster of Taft-Peirce contract clients has extended so widely that it has become almost a country-wide commonplace to advise: "If you have a good idea, but not the time or experience to develop, tool up, or build it, *Take It To Taft-Peirce.*"

Taft-Peirce Contract Service

is described and illustrated in this interesting gravure volume, a copy of which you may obtain by writing on your letterhead to:

The Taft-Peirce Manufacturing Co., Woonsocket, R. I.



NWLB Steps In

Board takes jurisdiction in
Pacific Northwest lumber row.
Woodsmen are angered over
denial of wage increase.

By mid-April the National War Labor Board expects to have a new headache. This one concerns the wage demands of 60,000 workers, both A.F.L. and C.I.O., in the Pacific Northwest lumber industry. The outcome may be the determining factor in the lumber supply crisis (BW—Feb. 19'44, p9).

• **Lure of the Shipyards**—The lumber workers in Oregon, Washington, Idaho, Montana, and California are frozen to pay scales the minimums of which range from 80¢ (pine) to 90¢ (Douglas fir) an hour. Such wages are no inducement in an area dominated now by shipyards which pay \$1.20 an hour. So the lumber workers want more money, and after waiting many months, some are getting ugly about it.

The West Coast Lumber Commission, set up by NWLB to handle such matters (BW—Jan. 30'43, p80), turned down the wage demands last month, and a flurry of strikes was the lumber worker's answer. Now the national board has assumed jurisdiction and demoted the commission to the status of a hearing panel in consideration of the present controversy.

• **What They Want**—The demands which the commission rejected were for a minimum of \$1.05 an hour, presented by the A.F.L. Northwestern Council of Lumber & Sawmill Workers, and \$1.02½, by the C.I.O. International Woodworkers of America.

What burned up the unions and their members was that at about the time the commission said no, both the War Manpower Commission and the War Production Board certified that the lumber industry was suffering from shortages of workers and faced a production crisis. The unions argued that the lumber commission knew about the certifications—and therefore ignored them—before rendering the negative decision.

• **Shortages Estimated**—Whatever the chronology of events, the commission told the lumber workers the door was still ajar and, as soon as the strike wave passed, commenced hearings on the WPB and WMC certifications.

At the hearings, WPB officials estimated 1944 lumber requirements at 35½ billion board feet and production at 34 billion—possibly as little as 31 billion.

WMC spokesmen also painted a dark

more. They estimated that 27,275 workers will be needed by lumbermen in the five states by July 1.

Operators Disagree—Lumber operators about one-third of them were represented—challenged the opinions of both agencies. They argued that production year is far ahead of last year and that manpower isn't critical. Higher wages, they contended, won't coax workers from the shipyards to the woods if they like city life. It was asserted that many shipyard workers have turned to wages of \$18 to \$20 a day as fallers and buckers in the woods.

Their Own Daily

Unions in boom town try their hand at publishing a paper. Mass subscriptions give big lift to growing circulation.

Two A.F.L. unions in Vancouver, Wash., have started a daily newspaper, partly, they say, to assure themselves getting news free from antilabor bias, partly as a business venture. They claim to be succeeding on both scores.

Coverage Protested—The Kaiser shipyards in Vancouver, on the banks of the Columbia River, have boomed the town's population from 19,000 before the war to almost 70,000. A good part of the newcomers were trade unionists who took exception to the news coverage of the town's only daily paper, the Columbian.

Union dues from the influx of new members swelled the treasuries of the local branches of the International Assn. of Machinists and the Painters Union to such an extent that they decided to invest some of their funds in getting the kind of paper they wanted to read.

Started With Weekly—Teaming up with a local radio announcer and Democratic Party leader, Marion Sexton, the two locals last summer paid \$50,000 for the Harlan-Duncan job printing firm, which had for 30 years been publishing the weekly Clark County Sun. The unions continued publishing the weekly. Last month the unions branched out to the publication of a daily newspaper, the Sun—complete with Hearst's International News Service reports, funnies, and a modern 12- to 16-page tabloid format.

Mass Subscriptions—Practicing what they preach, the unionists-publishers signed a contract with the International Typographical Union covering those of their 28 employees working in the composing room.

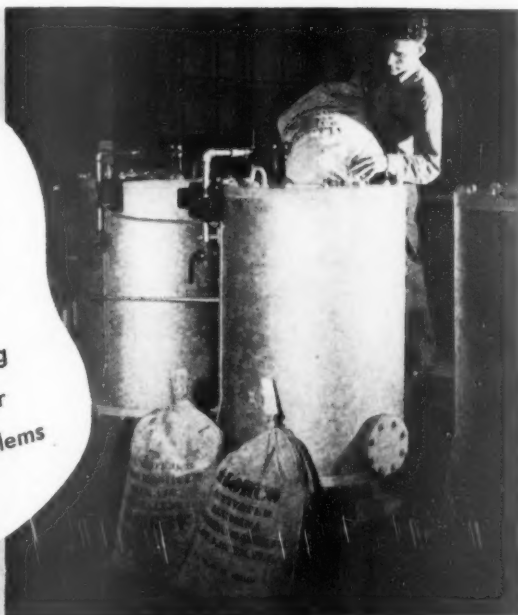
To get the daily off to a flying start, the machinists, the painters, and a build-



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Will you be ready for S-Day?



• An American corporal guards high-ranking German officers on their way to a prison camp

Surrender Day for Germany draws nearer. When the big headlines flash the news, American manufacturers can convert far more of their production to the consumer durable goods so urgently needed for homes, farms and industry. Many of these will be made of the sheet steel now earmarked for war uses—the material so economical for peacetime products, so adaptable and easy to fabricate.

For more than 40 years ARMCO has been developing *special purpose* sheet metals. An example is ARMCO ZINGRIP, which has a special zinc coating that will not flake or peel when severely formed. One of its war uses is in deep-drawn cans for powder.

Sheet steel is not one but a large family of steels, each with distinct characteristics and advantages. We can help you select the grade best suited to your purpose—whether you are looking for sheets combining great strength with light weight; special finishes or coatings; attractive appearance; or exceptional fabricating qualities; or combinations of these qualities.

And perhaps our knowledge of markets for sheet metal products can benefit your sales organization. Just let us know what you are making or planning to make. The American Rolling Mill Company, 1251 Curtis Street, Middletown, Ohio.

HELP FINISH THE FIGHT
—WITH WAR BONDS



Special Purpose Steels FOR TOMORROW'S PRODUCTS

ing laborers' union bought mass subscriptions for their members.

Sexton, who is president of the publishing company, although he owns 2% of the stock, claims that the circulation is growing (7,000 to union members, 2,000 outside subscriptions) and that the paper is making money. Editorial policy is dictated by the union, says Sexton. "I wouldn't have a dictated by any labor unions."

• **Little Union News**—In addition to being owned by unions, the other interesting fact about the Sun is the amount of union news in it. There is nothing in the masthead to indicate union ownership. It reads this way: "This publication is owned by over 4,000 of our neighbors and is published in the interests of the Greater Vancouver and Clackamas County area."

Interim Tax Dodge

Workers shy away from higher brackets—even by refusing full wage increases—to keep withholding deductions low.

To dodge being placed in a high withholding tax bracket, many workers—particularly in service industries, such as laundries—are refusing to put in an hour or two of overtime which would raise them to a higher category of tax payments.

• **They'll Take the Chance**—They are more interested in the immediate cash in their pay envelopes than in annual income and are willing to take a chance that the tax collector won't catch up with them at the end of the year.

For example, a woman who works 48 hours a week at 40¢ an hour would make \$19.20. She would thus come in the \$15-to-\$20 tax bracket, and if she were married and had no dependents \$3.50 a week would be withheld from her earnings.

• **Less to Take Home**—By working an hour overtime at time and a half, she would make \$19.80 and be in the same bracket. But if she worked two overtime hours, her wages would be \$20.40. She would then be in the \$20-to-\$25 bracket, and \$4.50 would be kept out of her pay envelope. Thus for working 50 hours she would take home 40¢ less than for 49 hours of work—\$15.90 instead of \$16.30.

Employers have been trying to combat the clock watching and the unwillingness to work overtime which ensues from this arithmetic by pointing out that the tax collector at the end of the year will collect the balance due him.

Even if the recommendation of the

House Ways & Means Committee that 100,000 taxpayers earning less than \$10,000 a year be exempt from filing tax returns is adopted by Congress, overpayments still will be collected.

Full Increase Fought—Another way which bracketwise employees are trying to beat the collector is on pay raises. If a worker is due for a \$5-a-week raise, say from \$25 to \$30, he may ask for a \$4.50 boost instead of \$5. He will thereby draw \$1.50 more a week because he would continue to remain in the \$20-\$30 withholding bracket rather than being jumped to the \$30-to-\$40 classification.

Under the bracket system, the rate of payment rises \$1 a week for each \$5 increase in the lower ranges to \$4 a week for each \$10 jump when the pay rate approaches \$200 a week. An employee making more than \$200 a week pays 20% of the excess.

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"COOKIE" CUTTER

Grandma Barbara Minshall and her experience with cookies are credited with solving a problem for Lockheed Aircraft, Burbank, Calif. Operating a punch press that turns out cookie-shaped disks of sponge rubber, she had trouble with material sticking to the cutter. Mineral oil, spread on the rubber, prevented sticking but harmed the goods, and applications of wax stalled production because it had to be cleaned off. So in her own kitchen, Mrs. Minshall developed a mixture of vegetable shortening and paraffin that does the trick. The formula, later improved by company chemists, netted her a \$417 company suggestion award.

1, 194



IN DEVELOPING A NEW PRODUCT

Requiring a Special Application Fractional Horsepower Motor



THOROUGH ENGINEERING is the basic factor behind the successful operation of this Feathering Pump motor and many other special application motors we have designed for all types of equipment.

● Close cooperation between product manufacturer and motor builder, *right from the start*, results in such important advantages as these:

1. Correlation of product and motor design to provide a thoroughly integrated unit . . . essential for top performance.
2. Frequently product design suggestions can be made that will not only reduce product weight but will improve compactness and appearance.

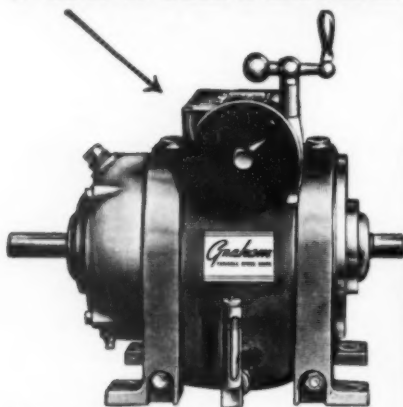
Our thirty years' experience covering all types of fractional horsepower motors is available to your engineering department.

THE BLACK & DECKER ELECTRIC CO.
KENT, OHIO

Black & Decker

FRACTIONAL HORSEPOWER
SPECIAL APPLICATION **MOTORS**

★ No other Variable Speed Transmission GIVES EVERY SPEED FROM TOP TO ZERO PLUS REVERSE



ONLY THE
Graham
VARIABLE
SPEED DRIVE
GIVES YOU

1. Not just 5 to 1 range, or 10 to 1, or 100 to 1, but every speed to zero, forward and reverse, without stopping the motor.
2. Full torque guaranteed over the entire speed range.
3. Close speed adjustment with accurate return to pre-set speeds.
4. Extreme compactness, all metal, self-lubricated, no belts, moderate price.

Machine designers who are modernizing for the post war market should investigate the Graham.

Write for Bulletin 506

Machine Builders — Order a ½ H.P. Graham now to prove its advantages — use it in your laboratory as a utility all-speed test unit. WE CAN DELIVER!

GRAHAM TRANSMISSIONS INC.

2706 N. Teutonia Ave. Milwaukee, Wisconsin

Scouting for Jobs

Northrop Aircraft is seeking postwar jobs for excess workers. Company takes a realistic view of its peacetime production.

Tackling the problem of holding needed workers to meet production schedules right up to the time of the armistice, Northrop Aircraft, Inc., is rounding up postwar employment prospects for surplus workers.

• **A Systematic Search**—The company is trying to cut down the uncertainty induced by rumors of cutbacks and peace scares which might send war industry employees scouting for permanent jobs.

Northrop's industrial relations department has been taking inventory of the skills and trades of company personnel and is making a systematic search for jobs in peacetime industry in which their abilities can be used. It will give office space to representatives of concerns looking for postwar workers.

• **He Is Realistic**—La Motte Cohu, Northrop's general manager and board chairman, describing the program in the March issue of *Aviation*, a McGraw-Hill publication, proceeds on the realistic assumption that after the war the com-

pany will operate at 10% of its peacetime production. He estimates that this requires 2,500 of the company's current force of 10,000.

On the theory that at least 50% of the 2,000 men and women who leave Northrop to go into military service want their jobs back, the company would have 11,000 workers to consider, 8,500 more than the estimated number needed.

• **What May Happen**—Of the present force, 3,000 are women who, Cohu seems confident, will want to go back to housekeeping or schoolteaching. The other 1,150 are students, or men who came out of retirement to help the effort and who will, presumably, leave their jobs when the patriotic impetus is removed. Some 2,500 came from sales and service occupations, and Cohu believes this group will be quickly reabsorbed.

This leaves a total of approximately 1,850 surplus workers, and it is the excess for whom the company is trying to line up jobs.

M.E.S.A. STRIKERS WIN POLL

The Mechanics Educational Society of America tasted the sweet fruits of vindication last week when it was chosen, by vote of 556 to 44 over the C.I.O. United Auto Workers, as ex-



UNIFORMS FOR WORKERS

In neat aprons and trim overalls, women war workers present the first public exhibition of the officially approved feminine work clothing. Developed by the American Standards

Assn., which already has designed women's safety shoes (*BW*—Aug. 7, p98), this apparel is aimed at safety, comfort, economy, and durability. A.S.A. committees from production and marketing fields designed each uniform for a particular type of work.

The Sergeant, the Professor, and Several Guys named Joe



THIS IS THE STORY of a Jap bombing attack on an American airfield in the South Pacific.

The attack, by and large, was a failure. And that was partly because of . . .

THE SERGEANT

He was in charge of an antiaircraft gun crew. From a warning station half a mile away, he got news of enemy planes approaching from the northeast.

Within a few seconds, the sergeant had given certain orders . . . "Japs coming in at 2 o'clock . . . on target . . . begin tracking . . . fire!" He gave these orders to . . .

SEVERAL GUYS NAMED JOE

They were as busy as beavers behind their rampart of sandbags surrounding a 90-millimeter antiaircraft gun equipped with a Sperry-Vickers Power Control. The Japs came into telescopic sights. The guys named Joe checked them until they were within range.

As the gun began to fire, twenty-

five shells to the minute, bombs spewed out of the enemy planes. The sergeant was watching, and a few seconds before the bombs struck the ground, he blew his whistle. The crew ducked behind the sandbags until the bursts were over, then leaped to their jobs again. One Jap fell in flames. Another dived. The rest ran.

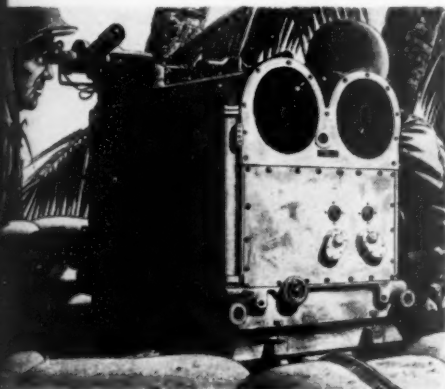


THE PROFESSOR

The professor was a machine . . . the Sperry Antiaircraft Director . . . a lightning calculator that does problems in higher calculus faster than twenty mathematicians.

With the information he got from the tracking sights, he automatically figured the enemy's range, his speed, the timing

needed for the shell fuses, and all other firing data. Then through the remote-control system cables to the Sperry Power Control, the Professor instantly sent the data to the gun. The gun was aimed automatically, the shells burst where they would do the most good.



THE PROFESSOR, and his Power Control, are Sperry inventions. They were developed over a period of years in co-operation with the United States Army.

When America entered the war,

her antiaircraft equipment was the best in the world. We believe it still is the best. In fact, it's so good it is almost worthy of the sergeants and the guys named Joe who operate it.

★ LET'S ALL KEEP BACKING THE ATTACK ★

SPERRY

CORPORATION

30 Rockefeller Plaza, New York 20

FORD INSTRUMENT CO., INC.
SPERRY GYROSCOPE CO., INC.
VICKERS, INC.

Waterbury Tool Division, VICKERS, INC.

How many "mental sit-downers" have you in your organization?

"In every factory and store, among office workers and salesmen, costly 'sit-downs' have been going on for a hundred years—*mental sit-downs*", says Craig Davidson. "Commands to do thus and so have met with mental sit-downs which have been just as effective in blocking production and sales as any physical sit-down that ever stopped an assembly line."

"That is one reason why this book," he goes on, "should be useful to any man whose job is to get other men to do their work right. It should visualize for him *what causes mental sit-downs* and *what to do about them*."

Getting Things Done in Business

By EVERETT B. WILSON

Director of Porto Rican Trade Council,
Formerly Assistant Director of Personnel,
Kroger Grocery and Baking Company

Second Edition, \$2.50

"An executive's success depends squarely on two points: whether he has good ideas and whether he can get his ideas actually and properly used." This book deals with methods of getting your ideas used efficiently. It tells how to get policies, plans and instructions carried out as they were designed to be carried out. It is in effect a working manual on leadership. It tells how to secure effective and intelligent cooperation.

*Have you seen the
Revised, Third Edition*

Hutchinson's STANDARD HANDBOOK FOR SECRETARIES

616 pages, 6 x 9
\$2.95

CAN you depend on your secretary to handle any assignment judiciously, quickly, correctly? Can you depend on her English?—her smooth and efficient handling of people? Here is a new book that spells better results in all work of the secretary. Placed in your secretary's hands it will be invaluable in assuring the correctness of correspondence, in eliminating error, in promoting good relations, in providing a wealth and variety of information that will enable her to handle many details of work with more satisfaction to you.



A practical set of suggestions to executives giving detailed directions for getting employees to do their jobs as management thinks they should be done.

Gives you many practical ideas on:

- What are the real reasons why subordinates disregard instructions?
- What can be done to get instructions carried out efficiently?
- What are the disadvantages of driving?
- How can you improve subordinates' attitudes?
- How can you really check performance?
- How can you criticize subordinates effectively?
- How can you develop responsible subordinates?
- How can you dispose of alibis?
- What is the technique of developing enthusiasm?
- How can you guard against troubles of jealousy?

Examine this book for 10 days

SEND THIS MCGRAW-HILL ON-APPROVAL COUPON

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Send me the books checked below, for 10 days' examination on approval. In 10 days I will pay for the books, plus few cents postage, or return them postpaid. (We pay postage on orders accompanied by remittance.)

- ☐ Wilson—Getting Things Done in Business, \$2.50
☐ Hutchinson—Standard Handbook for Secretaries, \$2.95

Name
Address Position
City and State Company BW-4-1-44

(Books sent on approval in U. S. and Canada only)

sive bargaining representative for the toolroom employees of Willys-Overland Motors, Inc., at Toledo, Ohio.

The unaffiliated union contended that to hold such an election was a waste of time, and when, two months ago, the National Labor Relations Board insisted that a vote be taken, M.E.S.A. locals at 44 Ohio and Michigan plants called protest strikes, tying up 25,000 war workers (BW—Feb. 12, p. 99).

SERVICES SLAPPED DOWN

A joint Army-Navy excursion into the province of the National War Labor Board was beaten back with loss of face for the services this week as the board told the military, in effect, to mind its own business.

A wage dispute at a Carnegie-Illinois Steel Corp. plant developed into a strike before all grievance-settling machinery had been brought into play. Harried Army and Navy officers in the plant pleaded with the men to go back to work, promising that the dispute would be certified to NWLB and decided on its merits.

NWLB refused to be bound by the officers' promise, maintaining that to let other government agencies commit the board in such fashion would make it subservient to their dictates.

The board had no sympathy for the military personnel whose prestige in the plant can be expected to decline. It did, however, express sorrow for the strikers because "these men will doubtlessly feel duped." Nevertheless, it upheld the rule that no board action can be taken until all grievance-handling procedure has been tried and failed.

HELPING THE VETERANS

In the welter of words about jobs for returning war veterans, two plans for action stand out.

Tests of new techniques and methods of handling veterans' problems are now being made in seven of War Manpower Commission's U. S. Employment Service offices, picked as demonstration centers for the variety of problems they present. A program developed from these tests at Los Angeles, Houston, St. Louis, Minneapolis, Philadelphia, New Haven, and Denver will be applied in the 1,500 USES offices.

Under a recent agreement, Selective Service will supervise the veteran's re-employment in his old job, but WMC will take over if the ex-service man wishes to seek new employment.

The Mellon Institute's Industrial Hygiene Foundation, Pittsburgh, has formed a panel of physicians to which employers may turn for practical help

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successful placement of disabled
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is some work suited to almost
disabled person, according to Dr.
Selby, head of the physician's
who is also General Motors
's medical consultant.

10 YEARS—TOO LONG

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The National Labor Relations Board
ruled that a collective bargaining
agreement written to last "for the dura-
tion of the present war or for two years,
whichever is longer" runs for an unrea-
sonably long period. The board made
this decision in a case involving C.I.O.'s
Pittsburgh Plate & Steel Workers, which
petitioned for an election in the Ne-
braska mines of Basic Refractories,
Inc.

The C.I.O. union found its drive for
representation blocked by an A.F.L. con-
tract that had already run two years and
was written to last for the duration of
the war. NLRB's decision will be fol-
lowed by an election.



THUNDERBOLT COUNTER

th thunderbolt that strikes a power
line can now be forced to leave its
"calling card" by a small electrical de-
vice. Strips of metal foil between two
lenses of transparent plastic extract
the "signature" from the bolt to record a black
mark for each strike. The new West-
inghouse recorder (above) is mounted
on power-line towers to check the op-
erations of lightning arresters and de-
termine needs for added protection.



BALL and ROLLER BEARINGS

Standard and Special

FROM 6" INSIDE DIAMETER TO 100" OUTSIDE DIAMETER
COMMERCIAL FINISH OR ULTRA-PRECISION

Radial Ball Bearings • Thrust Ball Bearings • Radial Roller Bearings
Thrust Roller Bearings • Taper Roller Bearings

Straight or Self-aligning • Extra Heavy Duty or Special Light Type

LIGHT WEIGHT NON-METALLIC CAGES OR STANDARD BRONZE TYPE

★ *Early Delivery* ★

Also any type of

PRECISION MACHINE WORK OR GRINDING

to unusual accuracy in large diameters

ATMOSPHERE HARDENING • FLAME HARDENING • PRECISION HEAT TREATING
METALLURGICAL LABORATORY • MICROSCOPY AND PHYSICAL TESTING

★ ★ ★



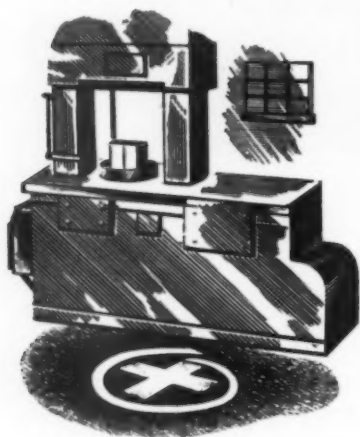
For excellence in production of extremely precise,
unusually large ball and roller bearings

THE **KAYDON** ENGINEERING CORP.
McCRACKEN STREET • MUSKEGON, MICH.

Specialists in Difficult Manufacturing

Missing from Action!

Molder Dan Johnson. Last seen working in Shop D. Unprotected hands were cause of painful injury. Will recover. Expected back in two weeks.



Another worker lost for weeks! Another slow-up of production. Another loss of many dollars.

Leaders in industry endorse JOMAC INDUSTRIAL WORK GLOVES because they are saving thousands of man-hours. Workers' hands are protected. Production is speeded. Jomac's extraordinary fabric is a loop-finished cloth that is thick with protective "cushions." And these new-type gloves offer economy features, too... long-wearing and may be washed repeatedly. Available in regular work glove models, and also in special Heat-Resisting styles.

Test JOMAC INDUSTRIAL WORK GLOVES in your plant... check them for their economy and increased production records. Write for full details.

C. Walker Jones Co., 6135 North Lambert Street, East Germantown, Philadelphia 38, Pennsylvania.



WORKING
IN AMERICA'S
GREAT SHOPS

JOMAC
INDUSTRIAL
WORK GLOVES

MARKETING

Surplus for Sale

First joint effort by U. S. and industry to move critical items on the open market retains WPB regulations on priorities.

Five of the largest aircraft manufacturers in the East offered for sale more than \$50,000,000 worth of surplus inventories this week in the first joint effort by industry and government to redistribute on the open market critical materials, tools, and components dammed up by contract terminations and modifications in designs.

• **Conducted by WPB**—The two-week sale (through Apr. 8) at Hotel McAlpin in New York is being held under the auspices of WPB, and is being watched closely by military procurement agencies and the Smaller War Plants Corp., which are cooperating in advisory capacities.

The sale is being held in an atmosphere similar to an industrial exhibit and somewhat akin to the sample-room transactions made by a traveling sales-

man. The "drummers" in this case are top-flight aircraft producers: Republic Aviation, Bell Aircraft, Glenn L. Martin Co., Eastern Aircraft Division of General Motors, and the Eclipse-Pione Division of Bendix Aviation Corp.

• **Galley Steals the Show**—Offered for sale are more than 5,000 items of materials and components that range from such basic materials as bars of aluminum and steel in 20-lb. lots to self-sealing gasoline tanks and perishable tools (those that wear out quickly).

Stealing the show is a complete galley (kitchen) unit, weighing only about 1,000 lb., which Martin built for its Martin patrol bombers. Complete with six food lockers, and two 24-v. electric stove burners, the galley is the victor of a Navy modification in favor of lighter weight. Martin has on the block 20 of these all-aluminum units which cost \$360 to build.

• **Priority Prevails**—Retailers whose interest is aroused by these galleys, or by the bolts, screws, tools, and other items readily salable on civilian markets, may find themselves at the end of a long waiting list. For although some of the surpluses will be channeled into the critical trade, WPB regulations still



An all-metal combination sink and electric stove for Navy bombers catches the eye of prospective buyers at the aircraft builders' first surplus goods sale.



PLASTIC PANTS

to match your coat and vest?

1 "I'm not joking," said our plastics expert. "Your post-war Sunday suit may be spun entirely of plastic yarn. Soft, long wearing, stainproof..." He may be talking through his hat, but you can bank on this: When better and trickier plastics are made, Taylor Instruments will help make them—from raw material to finished product!



2 Plastic dishes, for instance, that won't bust when you drop 'em (the Army's using some right now). Plastic shoes with a permanent shine. And beat this: plastic windows that you can see out of—but not into!



3 And here's a dandy! Phosphorescent plastic floors—a permanent night-light! We're not in the plastics business. But we're supplying the plastics industry with the instruments needed to make their products *better!*



4 What have we got up our sleeve? Some swell ideas, including this plastic Fisherman's Barometer that tells when fish are biting. If you can't get the Taylor Instrument you want *now*, blame the war—and buy more Bonds!



5 You can still get Taylor Fever Thermometers. And if you're in industry, your Taylor Field Engineer may have good news about deliveries on instruments you need! Taylor Instrument Companies, Rochester and Toronto.

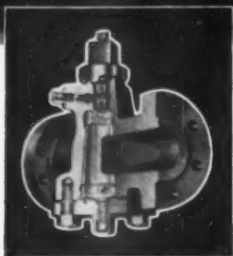
Your One Best Plan

Our company is noted for its variety of policies and payment plans. Your Prudential agent will help you choose the one most suitable for your special needs and circumstances.

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The PRUDENTIAL
INSURANCE COMPANY OF AMERICA
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Hypreseal Type

"That's the Valve to use."

Corrosion-resistant • Erosion-resistant

MERCO NORDSTROM VALVE CO.

Subsidiary of Pittsburgh Equitable Meter Co. PITTSBURGH 8, PA.

NORDSTROM
LUBRICATED VALVES



Typical of the five exhibits featuring surplus airplane tools and parts for sale is Bell Aircraft's display of some 700 items worth more than \$2,000,000.

will prevail over excess priority materials. Thus other aircraft makers, the armed forces, and other war-goods producers will get first crack at the surplus items. Behind them will come the essential civilian-goods producers.

• **Termination Involved**—Because some of the items are involved in terminated contracts, procurement agencies are standing by to protect their stake in the settlements by seeing that top values are received for those materials.

Despite its size, the sale reflects no general cutback in aircraft production or uncontrolled inventories among manufacturers in the East. Similar surpluses are also being piled up on the West Coast.

This was graphically illustrated when several firms burned up the wires with offers to fly to the sale samples of their surpluses. But Eclipse-Pioneer's Joseph E. Corker, manager of the sale, and William D. Cloose, WPB's acting regional redistribution chief at New York, are declining such offers—with the explanation that theirs is strictly a regional show.

NEW PLANT CLOSES

Black market competition that forced poultry prices into an illegal attic above OPA ceilings was blamed by Wilson & Co. in closing its new \$250,000 poultry packing plant in Cumming, Ga., a few days after it began operations with 200 employees.

Most of the chickens that have been going to market from the farms in Cumming, and Forsyth County, Wilson executives said, were being snapped up by outside purchasers. Wilson indicated willingness to reopen as soon as it

ould do business by "legal methods."
To get an extra \$10 above ceiling
prices for a truckload of chickens, a
farmer could bet the willing buyer \$10
that Mt. Mitchell was higher than Stone
Mountain, or some other sure thing.
The buyer would pay his \$10 "loss" on
the spot, after going through the mo-
tions of a deal at OPA prices.

Hats and the War

Millinery industry eases
materials and labor problems
with little hats which give wo-
men the chic styles they demand.

When the War Production Board
first restricted the decoration and yard-
age in American women's gowns by the
famous limitation order L-81, and cur-
tailed the style and color—as well as the
number—of their shoes under M-217,
the ladies began to offset the wartime
restrictions in apparel with the most
elaborate hats that had been seen since
the twenties (BW—Nov. 28 '42, p66).

• **A Trend Ends**—This trend was short-
lived. Now that the bonnets for this
Easter season have arrived, it is obvious
that the passion for "miles of veiling"
and "cascades of feathers and flowers"
has been entirely spent. The ladies
stopped demanding excess ornamenta-
tion when they found that the nation's
designers regarded WPB restrictions
merely as a challenge, and were turning
out shoes and frocks that were little, if
any, more severe than prewar models.

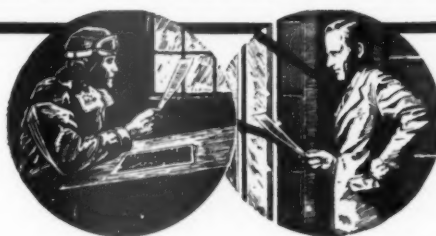
• **Labor Shortage**—More important, mil-
linery makers found that such intri-
cate and material-consuming headgear
further complicated their labor short-
ages. Actually, the materials situation
never has been critical in the millinery
trade, because hats can be made from
practically anything. But manpower is
just as short for the millinery trade as
it is for any other nonessential industry.

Hence the industry and its feminine
customers have turned to "little hats"
which require less material and fewer
man-hours than do wide-brimmed pic-
ture hats and such.

• **Adequate Supply**—Millinery men have
conscientiously tried to provide an ade-
quate supply of feminine headgear at
low prices, as well as in the high-price
brackets. They admit that the vogue for
hats that are simple and small has been
a major factor in saving the trade from
inflationary prices.

In almost any other line of consumer
goods, an item that was sold at its pre-
war price, but represented less material
and workmanship, could be considered
inflationary because of quality deteriora-

TARGETS FOR TOMORROW



In rust prevention... The war against rust will
never end. Yesterday the job may have been primarily
to protect iron and steel from plant to battlefield.
But tomorrow the needs will be more stringent—for
materials now being made may be stored for months
or even years before they will be used.

Experience has been a good teacher, even if its lessons
have sometimes been expensive. Packaging has become
a major issue. What was learned on beachheads and out-
lying bases when cases were opened has enabled Uncle
Sam to help industry wage war on corrosion.

E. F. Houghton & Co., which has made rust preventives
since right after the Civil War, offers approved prod-
ucts which meet, and exceed, the standards set forth
in government "specs". A list of those products is
available upon request.

State your rusting problem—inter-plant, between-
operations, in storage or shipment—and let the
Houghton Man make recommendations which will
help you win that battle against corrosion.

E. F. HOUGHTON & CO.

303 W. Lehigh Ave., Philadelphia 33, Pa.

INDUSTRIAL OILS AND LEATHERS

tion. But women never have paid solely for materials and workmanship when they bought hats—they bought that elusive element called style. If they get the same amount of style, although it is wrapped up in less material and fewer man-hours, there is little likelihood of complaint.

● **Price Trends**—The Millinery Stabilization Commission, which represents both labor and management in the New York market, reports a slight decrease last year in the number of labels sold for hats retailing under \$2.98. The 1943 total was 34,000,000 as compared with 34,500,000 in 1942. There was an increase, on the other hand, in labels for hats having a selling price of more than \$2.98.

Hats in the above-\$2.98 price bracket increased from 9,500,000 in 1942 to 12,700,000 last year—but they still represented less than 25% of the total unit volume.

● **Prosperous Future**—The stabilization commission, which has reported detailed tabulations on the economics of its industry ever since the days of NRA, has not been able (due to its own manpower shortage) to tabulate total millinery sales in 1943. But sales are believed to have exceeded the 1942 total, which ran well over \$100,000,000.

Millinery makers are optimistic about continued prosperity. Ingenuity continues to pinch-hit for missing materials. Buyers, for example, express satisfaction with synthetic straws made from rayon and cotton, and say they prefer them to the cheaper types of natural straw.

As for the chief competitors of the trade—bareheaded vagues, and such meager substitutes as flowers, snoods, bandeaus, fascinators, etc.—milliners note with satisfaction that most retailers were unable to unload excess stocks of hair-do flowers last summer.

Alien Goods Sold

Custodian—with parachute silk, mummy, machine tools, and other merchandise off his hands—is ready to liquidate businesses.

Last Tuesday in New York City, the Alien Property Custodian opened bids on the properties of Ernest Schmitz, Hitler agent who formerly headed the German Railroad Information Office in the U. S., and on the goods of four less celebrated aliens. With this auction, APC concluded—except for one continuing retail operation—part one of its program for disposing of Axis-controlled assets in this country.

● **Companies Next**—Having finished the job of selling all tangible merchandise, the custodian's office is left free to concentrate on liquidation of some 300 business enterprises—firms like General Aniline & Film Corp., American Bosch, Carl Zeiss—whose stock is vested with the APC. As James E. Markham (page 101) took the helm from Leo T. Crowley, who resigned as custodian last week, officials estimated that this process would take another year.

In disposing of the tangible goods, APC has held some 300 separate sales since July, 1942. Many of the early sales involved the valuable war materials which were picked up by APC from harbor piers, packed and ready for shipment throughout the world when Pearl Harbor was attacked. Only buyers designated by WPB were eligible to buy much of these goods—aluminum sheets, steel bars, and machine tools.

● **Sale Restricted**—Similarly, millions of yards of silk, held by the U. S. offices of

Japan's giant trading companies—Mitsubishi & Co. and Mitsubishi Shoji Kaisha—were sold only to parachute makers. More general was the sale of tons of foodstuffs—notably shrimp, crab, and fishheads from Japan and frozen oranges bought for shipment to the Orient—which APC turned into trade channels.

But the public had no chance to participate until the custodian got around to the auction of general merchandise—objets d'art, and household belongings (many of which were stored, appropriately enough, in a warehouse in the heart of Yorkville, New York's German section). These were the sales which attracted bargain hunters anxious to pick up fine furnishings cheap, retailers and secondhand dealers intent on replenishing stocks, and a host of buyers who simply fancied themselves participating in a romantic piece of international intrigue.

● **Strange Contrasts**—Typical of the personal effects liquidated was the lot of this week. The collection contained genuine Biedermeier furniture—a living room suite and a large group of solid wood-finished dining room furniture, in contrast to these antiques, a ultramodern Kroehler bedroom suite in black enamel. Collectors regarded a set of Dresden china candelabras as among the most valuable antiques, but all visitors were charmed with a small music box whose lid bore a small gold plate engraved with this endearing message: "Peterchin: Joyous Xmas Dearest Love Nikki."

Among the book titles offered for sale were "Germany on Fifty Dollars" and "Pitfalls in English" along with such native volumes as a Morocco-bound edition of Goethe's works.

In this sale, as in all others, only the belongings of aliens who returned to



The Japanese screen being examined by a customer of Yamanaka & Co. is one of the few Japanese items in the store. At least 90% of the inventory is Chinese art. Edward Perbix, Alien Property Custodian official in



charge of the store's liquidation, describes a wood sculpture done during the Sung Dynasty (960-1279 A.D.) as valuable for traces of the original polychrome still visible on the 42-inch statue—and the jeweled chain on the chest



James E. Markham, seventh Alien Property Custodian in U.S. history, succeeds Leo T. Crowley after serving as deputy custodian for two years. In Mexico recently, Markham laid plans to make the experience of the U. S. available to alien property custodians of Latin-American countries. His junket marks the beginning of a drive on German chemical, drug, and film cartels which, he promises, will end European domination of such markets. He wants to see free competition among Western Hemisphere firms replace the system whereby such monopolies as I. G. Farben parceled out countries to various subsidiaries. And at home, his big concern is to keep enemy properties from reverting to alien control.

their native lands were seized and sold by APC. Aliens who remain in this country and are judged not disloyal keep title to their goods.

• **One Store Is Open**—The one unfinished piece of business in APC's program of selling tangible merchandise involves liquidation of the stocks of Yamanaka & Co., Japanese importer and merchant of high-quality goods.

Since the night of Dec. 7 when Treasury agents, then handling the business of the Alien Property Custodian, and FBI and Alcohol Tax Unit agents stood watch over all Japanese property, the government has administered the stores of Yamanaka & Co. Recently the Yamanaka stores in Boston and Chicago were closed, but the larger New York store with its famous collection of jade,

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Offset Labor Shortage

● Many companies—small as well as large—are now discovering the time-saving, money-saving advantages of modernizing their handling of materials.

For example, a paper pulp mill discovered how to simplify its shipping problem by introducing electric trucks.

It discarded the old-fashioned method of using two-wheeled hand trucks to load baled pulp in cars. Loading the mill's daily output of 12 to 14 cars had required 8 hours' work by 24 men.

The company modernized its method of handling shipments by using electric fork trucks. With two of these trucks **only 6 men** were needed to do the loading job that had formerly required 24.

With this modern handling equip-

ment, the mill avoided being crippled by a possible labor shortage—and it made important savings in the bargain. The two battery electric trucks actually save the mill over \$100 a day in labor costs.

● Until recently, management had concentrated its energies on cutting machine operation costs. Now it is learning that for the few cents it did decrease these costs, it can reduce the costs of handling materials to and from these same machines **by dollars**.

One of the most effective ways to do this is by introducing the use of battery electric trucks. They simplify the problems of shipping, receiving and warehousing of goods. They speed operations and cut costs.

FOREARM WITH AVAILABLE INFORMATION

We have prepared a new bulletin, "Unit Loads—Their Handling—Shipment—Storage," which covers the latest developments in material handling. We have also published other

booklets containing valuable information about material handling and industrial trucks. We will be glad to mail you free copies of these publications on request.

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In the Alien Property Custodian's New York showrooms, William Grasshoffer, a cabinet maker, checks the tag on the desk of Ernest Schmitz just

before this week's sale. It is of satinwood-finished Biedermeier—the 19th century German version of the more elaborate French Empire furniture.

porcelains, prints, statuary, screens, etc., is enjoying business almost as usual. The Japanese manager remains, working under the APC official in charge.

• **Net Profit**—Since Pearl Harbor, approximately half of the inventory has been liquidated. Sales of the New York store to date total \$825,000, of which \$140,000 has been paid in dividends to the custodian as sole stockholder. This sum represents net profits after federal income and excess-profits taxes and state taxes totaling \$164,000 were paid.

Yamanaka customers include museums, collectors, and regular patrons whose names, according to the APC, make the accounts receivable read like "Who's Who."

• **Mostly Chinese**—The stock—which ranges from a few gifts at \$1 to a Tibetan carved incense burner of mutton fat jade priced at \$17,500—is approximately 90% of Chinese origin. The Japanese-produced merchandise consists chiefly of modern copies of western wares. The custodian has left original Yamanaka price marks on the merchandise, but sells certain items at established discounts, ranging up to 40%, determined by current market values.

Except for collectors' items and luxury products, the custodian observes Office of Price Administration official ceilings in all sales.

• **Uncontrolled Mummy**—Not subject to price control, of course, was an Egyptian

mummy sold to a man who had come to the APC sale in search of office furniture being offered at the same time. Selling price was \$559.58.

Among the ceiling-free items, pearls have brought perhaps the best price. A Chicago buyer who paid \$50,000 for a string of pearls was chagrined to find the next highest bid only \$26,000, even when connoisseurs agreed that he had a bargain.

Miscellaneous goods with no counterpart in U. S. production also were without ceiling prices. Machine tools, for example, made for the metric system and destined for export, had to go to OPA for special ceilings, and since the custodian is permitted to sell only to U. S. citizens, special permission was required also to ship these tools to South America, where they finally went with the approval of various Washington agencies.

• **Problem in Tea**—APC men consider one of their biggest pricing problems a consignment of tea which had been brought to this country by the Formosan government for free distribution at the New York World's Fair. Officials were disturbed to find a bid of \$1.67 a lb. among others, all at least \$1 less. OPA was called in, as were tasters from all of the city's largest tea houses; and all they could agree on was that the tea was of the oolong family. It didn't taste like their cheap teas, and again, it didn't

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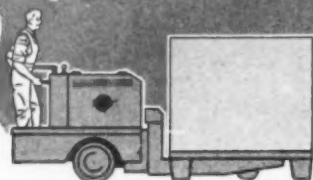
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Baker Low Lift Trucks load and unload forged parts, castings and other materials on skids—eliminating individual handling of pieces. In many cases shipment is made on skids, enabling trucks to also save time at receiving end. Illustration shows skid-load of zinc

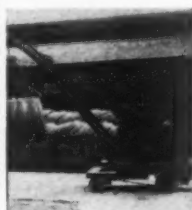
pigs being loaded into a box car.

Equipped with telescoping uprights a Baker Hy-Lift Truck can enter a box-car door with ease, and tier material inside the car, conserving shipping space. (See illustration). Actual savings in costs of loading and unloading operations with Baker Trucks have been reported as high as 75% over former methods.

Where material lends itself to shipment on wooden pallets, Baker Fork Trucks can greatly reduce time and cost of loading and unloading. One Company reports savings of 25¢ per ton, or \$12.50 per car—at the same time releasing seven men for other work. This procedure is called "Unit Handling."



Baker Crane Trucks have solved many difficult loading problems, where heavy, bulky parts or materials are to be shipped on gondola or flat cars. Illustration shows a crane truck with a large hook making quick work of loading heavy coils of wire at a wire mill.



A large aircraft manufacturer uses

Baker Hy-Lift Trucks to unload crated airplane engines weighing 2100 pounds from the boxcar in which they are shipped. One operator with a truck transports the engines either to storage, or to the assembly line—re-



lieving a number of men for other duties.

Highway-truck loading with Baker Fork or Hy-Lift Truck requires no loading platform. Sacks of bulk materials may be handled or shipped on pallets, eliminating the need for individual handling, and permitting tiering of material in warehouse or carrier.



* A bulletin "Unit Loads—Their Handling, Shipment and Storage" has just been published by the Industrial Truck Statistical Association. A copy will be mailed upon request.

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Plant and production managers, traffic managers, superintendents, purchasing agents and any others concerned with material handling will find the new Baker Catalog No. 52 a valuable reference.

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taste quite like their \$3 teas. OPA is still trying to decide whether the Chinese who bid it can pay \$1.67 for tea. Also being resolved by OPA is the question of whether or not a collection of German synthetic jewels comes under price control.

• **Disposal by Lots**—Probably the biggest compromise the APC makes with OPA is in lot selling. Because of the thousands of small items that the custodian has had to dispose of—particularly personal effects—item-by-item sale has been found thoroughly impractical, if not impossible. Hence household goods are sold in lots. One suite of furniture, one silver service may constitute a lot. But in small wares, as many as 100 items go into a single lot. Thus a dealer's search of scarce vacuum cleaners or electric irons will, in all probability, be obliged to take a large consignment of kitchen wares along with them.

The custodian—who is charged with the responsibility of getting the best possible price for goods liquidated—does not violate the ceiling on vacuum cleaners. But he does, by lot selling, bring down a premium price on such miscellaneous items as bath stools and bakeware dishes, thus realizing a generally higher total.

• **Not a Clear Gain**—Income from sale of all these valuables, and the not-invaluable, does not represent a clear gain for Uncle Sam. For the same confiscation procedure has applied to American property in enemy countries, and reimbursement after the war will be part of the international settlement in the sharing-down that will follow the peace treaty.

P. S.

The War Food Administration is worried about an increase in short-weighting and shortchanging since consumers have become too preoccupied with the post-war system to look at the scales or think of the cost per pound. State inspectors report fewer consumer complaints on the one hand, while they themselves have found an increasing number of packaged commodities giving short measure. . . . Despite slight relaxations last fall in Office of Defense Transportation package delivery restrictions, United Parcel Service in the New York metropolitan area reports deliveries 45% to 49% under last year. . . . The Office of Price Administration's slight relaxation of its ban on higher-priced lines (BW—Sep 25, p92), coupled with War Production Board moves to step up output of low-end goods, is beginning to have an effect. Buyers report more cheap and medium-priced women's and children's clothing, though the supplies of baby goods are still tight.

THE WAR AND BUSINESS ABROAD

BUSINESS WEEK

APRIL 1, 1944



In both Washington and London, dissatisfaction with the diplomatic conduct of the war has reached disturbing proportions.

Churchill's broadcast to the Empire—undoubtedly the weakest the Prime Minister has made—highlighted the fact that even the doughty warrior who has pulled Britain through one of the toughest stretches of history has lost his tone of confidence and authority.

More to blame than the physical aftermath of his recent illness is his apparent inability to outline a vigorous, concrete foreign policy which will provide an acceptable transition from the laissez-faire diplomacy of the 1930's to the concise, long-term brand that Soviet competition now demands.

Don't misinterpret the report that Anthony Eden may resign as Foreign Minister to head the government representation in the House of Commons.

Far from shelving the able cabinet member, **the move would make him virtually vice-premier.** He would carry a part of Churchill's administrative duties, interpret and steer vital legislation through the Commons, and be on hand to take over if the overworked Prime Minister needs an occasional holiday away from his office.

The Washington diplomatic scene is much more explosive.

A belligerent Congress is demanding a full airing of all foreign diplomatic projects. Behind the move is a growing conviction that:

- (1) The U. S. lacks a well-defined foreign policy;
- (2) Moscow is boldly outmaneuvering both London and Washington;
- (3) The President, piqued by his constitutional limitations, has promised moves which he lacks authority to make and which Congress will not support;
- (4) Secretary of State Cordell Hull has been bypassed by the military, which has the President's ear and which is demanding a bigger voice in diplomatic affairs than the immediate emergency warrants.

There will be political fireworks in Washington during the next few months, but **don't confuse election-year party maneuvering with the demands of a growing group of thinking individuals who are legitimately demanding a thorough overhauling and modernizing of both the State Dept. and this country's foreign policy.**

Overlooked by many during the present wave of pessimism is the fact that **this country possesses tremendously important bargaining weapons.**

With about **50% of the world's industrial capacity**, it is at once the biggest market for a wide range of products and best able to fill massive foreign orders for urgently needed rehabilitation equipment.

Its huge credit reserves are indispensable to at least a dozen nations if they are to carry out sound development programs after the war.

In its Surplus War Property Administration will be **hundreds of millions in machinery and equipment** for which foreign nations are already preparing to bargain.

It will have **50,000,000 tons of merchant ships** to use for barter or (as the world's largest cargo fleet) for bargaining purposes.

Because Britain has concentrated on building fighter planes, the U. S. will control the **biggest fleet of heavy planes**—suitable, after conversion, for

THE WAR AND BUSINESS ABROAD (Continued)

BUSINESS WEEK

APRIL 1, 1944

peacetime commercial service—and the best-equipped plants and the skilled personnel for building more of them.

•
Needed now is a carefully thought-out pattern of foreign operations against which to play these advantages. Responsibility for such a plan rests squarely on the President.

•
Aware that China will get nowhere in the postwar scramble for supplies and equipment unless it is prepared to present an itemized list of requirements and propose methods of payment, **Chungking will establish a procurement mission in Washington in the next two months which may eventually compare in size (several hundred) with the Soviet purchasing mission.**

In Chungking, final revisions are being made on the country's postwar industrial requirements. Based on Sun Yat-sen's plan for modernizing China and brought up to date by a corps of young scientists and technicians who have filled in the details, **final estimates—reduced to a series of five-year plans—will be completed within six months (BW—Feb. 5 '44, p111).**

•
To help put the finishing touches on the program and advise on schemes for modernizing and enlarging industries which can eventually resume exports to the United States, **30 U. S. experts are already in China or on their way to the Orient as a part of this country's lend-lease aid to Chungking.**

Before the end of the year, details will reach this country for equipment specially designed to meet China's requirements: small, easily transported units; simple, sturdy machines, to operate by hand rather than electricity.

•
Longer-term schemes call for intensive development of semiarid grasslands along the Soviet border as:

- (1) Sheep and cattle-raising regions (with imported stock);
- (2) Large-scale farms (after building numerous irrigation systems).

Taking a tip from the Russians in Outer Mongolia, **the Chinese are planning to introduce mechanized farming in all newly opened areas.** One U. S. manufacturer has already been approached with a proposition to build small tractors on a mass production basis for China.

•
Latin America continues to provide new opportunities for the export of U. S. technical skills and industrial capital.

Brazil, excited by the intensive study of postwar electrification in Latin America now being undertaken by the U. S. Dept. of Commerce, has suddenly stepped up plans to make complete surveys of hydroelectric potentialities along the Amazon (12 large falls), Sao Francisco (6), and Parana (19) rivers.

Venezuela has just placed a \$9,000,000 contract with two U. S. firms to build a waterworks in Caracas.

•
Manufacturers and contractors with an interest in Latin-American business should follow proceedings at the first conference of the Commissions of Inter-American Development to be held in New York, May 9-18, for a preview of potential business south of the Rio Grande.

Over-all plans for economic development in each of the 20 Latin-American republics will be reviewed by the sponsoring Office of the Coordinator of Inter-American Affairs, which will indicate the extent of the credits likely to be granted for each major project.

Land of Plenty

Kazakh republic emerges as the No. 2 arsenal and new Ukraine of Soviet Union. War speeds economic expansion.

Red Army spearheads probing toward the Baltic, into Poland, Bukovina, and Bessarabia, were forged and sharpened in the new industrial areas of the Urals, Central Asia, and the Far East.

On Their Own—After the first dark months of retreat, when the most productive industrial centers of the Ukraine were lost to the German armies, the Soviets turned for arms to the East and their allies.

But during the gloomiest days, they were on their own.

The trickle of lend-lease that made its way through submarine-infested seas during the first year of the war was only about 40% as great as a current month's lend-lease exports from the U. S. to all allies.

Decentralization—Biggest Soviet arms center, hidden behind mountains and censorship, lies in the mineral-rich Urals. No. 2 munitions center is in the second largest republic of the Soviet Union, the Kazakh Soviet Socialist Republic (map).

The decentralization program which put the Soviet economy with the first five-year plan focused first upon the Urals, then upon Kazakhstan. Gradually European Russia, most vulnerable in war, lost its overwhelming dominance in the production of coal, oil, steel, cotton, and many a foodstuff.

Industry in the Wilderness—Between 1929 and the prewar blackout of statistics, Central Asia and the Far East increased their share in Soviet production of coal from 15% to 26%, of oil from 6% to 17%, of peat from 16% to 33%, of steel from 17% to 33%.

Between 1939 and 1941, the war accelerated this trend. New industries were born in the wilderness and new cities grew around them. With the invasion of European Russia, industries, skilled labor, and refugees fled eastward ahead of the German armies.

The New Ukraine—Today Kazakhstan, land of nomads, sheep, and cotton, has become the home of war refugees from the Baltic, Byelorussia, and the Ukraine; it is the site of old industries moved from the West.

The Kazakh republic now holds a rank second only to the Russian Soviet

Federative Socialist Republic (BW—Feb. 1944, p113)—geographic heart of the Soviet Union—in the production of non-ferrous metals. It has become the new Ukraine, supplying cotton, sugar, grain, and cattle in expanding quantities.

• Iron and Steel Center—Before the war, the Karaganda coal fields lagged behind the Donbas, Moscow, Urals, and Kuzbas fields. Now it holds second place—pending the reconstruction of the Donbas—having surpassed both the Moscow and the Ural fields. Karaganda's production of 4,000,000 tons before the war has been nearly tripled.

The war brought Kazakhstan its first iron and steel mill, its first engineering works, and new arms and munitions plants.

Last year, light industry almost doubled its 1941 production.

• Agriculture Expands—Meat deliveries from Kazakh collective farms rose 25% in 1943.

Sown area within the republic rose from 9,750,000 acres in 1941 to 11,250,000 in 1942, and 12,500,000 in 1943.

The area devoted to kok-saghyz (the rubber-producing Russian dandelion) has been increased eightfold to supplement the 24,000 tons of natural rubber

now allocated to Russia from Ceylon production.

Sugar beet acreage has been trebled to make up for the loss of some 2,000,000 tons of Ukrainian beet sugar production. Central Asian output rose from barely 100,000 tons in 1937 to nearly 400,000 tons.

• Vast Herds Moved—Until recently the sandswept hinterland of Kazakhstan was shunned by farmer and herder. Irrigation opened new farm lands and pastures.

In the winter of 1941-42, faced with an acute fodder shortage, herders moved 200,000 cattle onto the Muvum Kumi, a sparsely grassed dunesland. Shelters were built to protect the cattle from blizzards. The next winter, 500,000 cattle wintered in the open, and this last winter the figure rose to 700,000.

• Rich in Metals—Kazakhstan is wealthy in many of the nonferrous metals for which the war brought increasing demand—copper, lead, tin, zinc, tungsten, molybdenum, manganese, and cadmium.

According to one Kazakh official, nine out of ten bullets fired on the Soviet front contain lead from Kazakhstan.

A new copper region, midway be-

CENTRAL ASIA

Development of Kazakh republic spurred by war-relocated industries and population



tween the Aral Sea and Lake Balkhash, now has a mining community of 10,000 at Dzhezkazgan—supplementing the bigger copper output at Balkhash.

• **A Second Baku**—When the Germans seized the Maikop oil field, came within artillery range of Grozny, and threatened Baku—source of more than 70% of Soviet oil—Kazakhstan's "second Baku" on the northeast Caspian shore was rapidly expanded.

To its development went most of the republic's capital investment, and a large share of lend-lease drilling, pumping, and refining equipment.

Kazakh farmers have been boosting their cattle herds in preparation for the rehabilitation of liberated areas. They have already contributed their share to the 600,000 cattle returned last fall to the Smolensk, Kalinin, Orel, Kursk, Rostov, and Stalingrad districts. Last year the cattle population rose 24%; sheep and goat herds by an equal percentage; hogs by 34%; and horses by 13%.

• **Industries Will Stay**—But evacuated industries will stay in Kazakhstan, and many refugees will make permanent homes in the fertile, underpopulated republic.

Thus the war has gone far to achieve the industrial decentralization started more than a decade ago; it has speeded the movement of populations eastward,

required for the development of the East and by overpopulation of the Ukraine.

Conceived as a safeguard against war, this war-born shift in the economic balance of the Soviet Union will speed the exploitation of the fabulous and still largely unmeasured potentials of Central Asia and the Far East.

British Refining

Increased capacity urged by petroleum executive as aid to England in postwar balancing of international payments.

Britain faces a basic postwar problem of balancing international payments. In search of a solution, new methods of attack—constituting a refined type of economic warfare—are being devised.

• **The Dilemma**—This war has cost Britain much of her merchant fleet. Valuable foreign properties have been destroyed in battle. Foreign investments have been liquidated to pay for imports of raw materials and arms. Enormous debts, of which lend-lease is the largest, have accumulated. As a result, Britain won't have the nontrade income to con-

tinue her practice of importing more than she exports.

Solutions to this dilemma normally envisage expansion of exports or contraction of imports. To contract imports without lowering domestic living standards involves substitution of home production for foreign production. Ordinarily food products are affected by such a shift toward autarky.

• **The Proposal**—But Britain also exports manufactured goods, and by substituting home manufacture for foreign manufacture, substantial savings can be obtained.

This is the tack that Dr. F. Kind, managing director of Manchester Refineries, Ltd., suggests with respect to Britain's postwar petroleum needs. The plan envisages a favorable shift in the balance of payments of £100,000,000 or about \$400,000,000.

In 1937, the United Kingdom imported 10,510,000 tons of petroleum and products—only 1,732,000 tons in crude form. By 1941, however, British refining capacity had been boosted to 5,600,000 tons—sufficient to handle more than half of the domestic petroleum product needs.

• **Increased Capacity**—Dr. Kind would increase refining capacity to handle 10,000,000 tons of petroleum products. Modern refining plants are capable of adjusting, within wide limits, the quality and proportion of refined products to conform to the national requirements.

In addition, Britain has a new chemical industry, growing around the expanding refineries and using byproducts of coal carbonization. The products of oil refining, largely gaseous, because they cannot be transported economically constitute a valuable addition to the potential of the chemical industry.

• **£20,000,000 Saving**—On the supposition that Britain expands its refining capacity to handle 10,000,000 tons of petroleum products derived from crude oil, Dr. Kind arrives at a figure of £2 per ton saved—a total of £20,000,000. (Prices are calculated at slightly above prewar levels and allowance is made for imports of more expensive types of crude oil.)

With this import figure and refining capacity, the byproduct yield of 1,000,000 tons could be converted into plastics, synthetic rubber (a pilot plant has just been authorized), fibers, solvents, and other chemical products with an estimated value of £75,000,000 (at an average of £75 per ton).

• **Results**—Adding another £5,000,000 for exports of refined products, and of refinery equipment, Dr. Kind predicts that the projected capacity would, within five to ten years, benefit the British balance of international payments by £100,000,000.

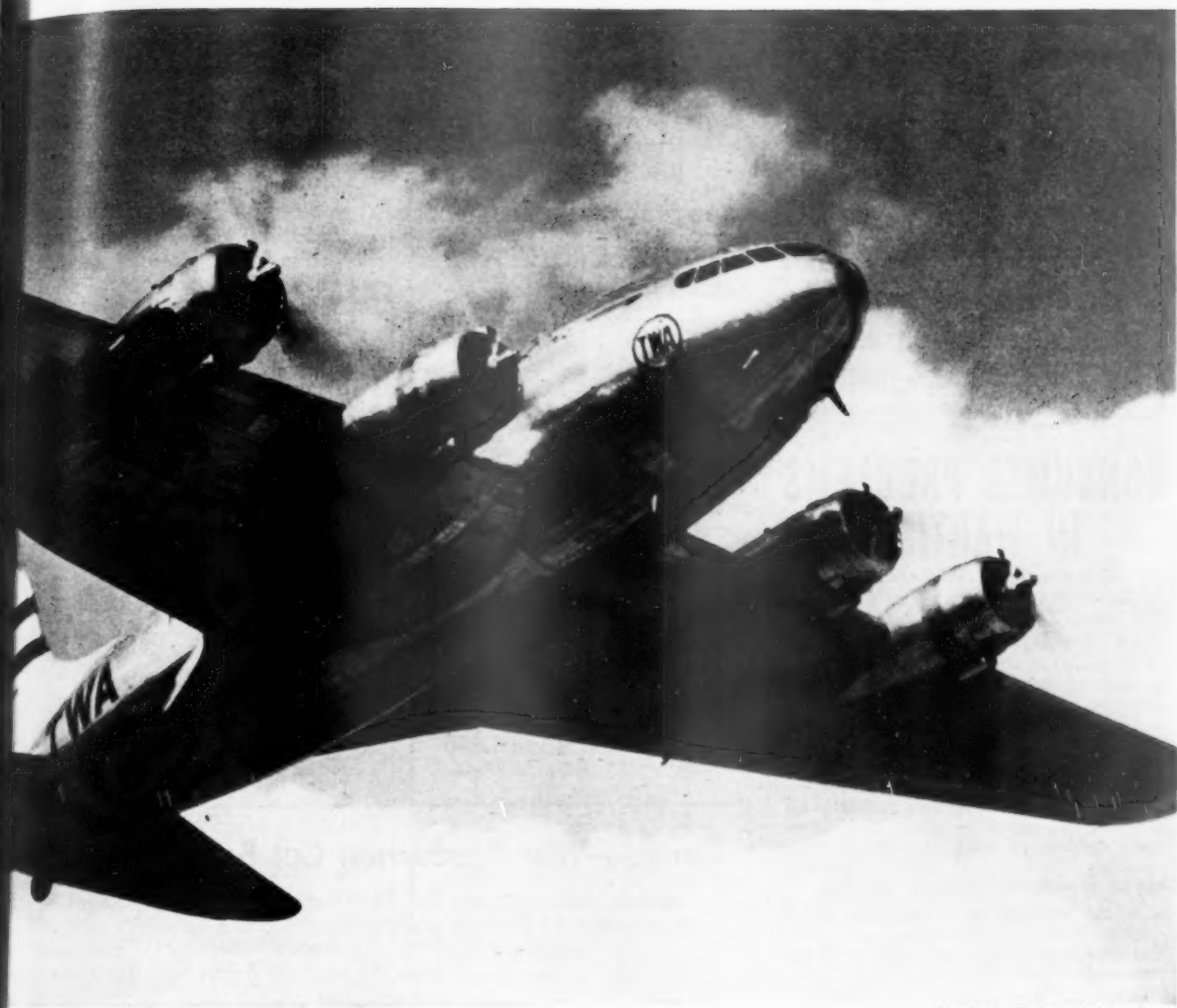


GOOD FROM BAD

If any good effects are attributed to the Nazi's 1940 blitz on Great Britain, improvement of national health—due to better eating—rates a top billing. For, despite rationing and acute food shortages, the average citizen is better fed than ever. This is largely accounted for by the government's 2,100 low-priced "British Restaurants" that began operations in such

heavily bombed cities as London and Coventry (above). Now serving an astronomical number of balanced, nutritious meals each week (400,000 in London alone), they're credited with cutting disease (venereal excepted) and death rates to the lowest levels on record. Many of the effects are showing up on the younger generation. Surveys show that children of 13 are now 2.4 in. taller and 10 lb. heavier than their parents were at that age.

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CANADA

Air Policy Attack

Private interests open a
barrage against virtual monopoly
planned for government-backed
airlines in Canada.

OTTAWA—Ink was hardly dry on Canada's new postwar air transport policy (BW—Mar.25'44,p116) when private interests opened a barrage against it. The plan submitted to Parliament would give government-owned Trans-Canada Airlines a virtual monopoly in domestic trunkline and international air operations.

• **Plans Favor T.C.A.**—Between-the-lines study of the plan revealed that the strategy of Munitions Minister C. D. Howe, who brought T.C.A. into existence in 1937, is to liquidate Canadian Pacific Railway's merger of all independent feeder lines, keeping these lines after the war in the hands of small operators to prevent any challenge to T.C.A.

Howe's plan aims to build T.C.A.

into a strong air transport agency which Canada would seek to impose slice of postwar international business.

• **Expansion Planned**—Reporting Parliament last week that its business had multiplied several fold during war, T.C.A. disclosed that it is already planning air transport services between Canada and the West Indies and South America. Since the Canadian government, in granting Pan American Airways a permit to operate to Alaska, reserved the right to seek use of Alaskan airport facilities for T.C.A., long-range Canadian plans also include air connections with Russia.

The route through the Northern Territories is to be treated as a main link in international transport and reserved for T.C.A.

Opponents of Howe's program attacking the plan to keep strong private interests out of the feeder operations and reserve this field for Canadian Air Force men. They maintain that few demobilized airmen will be able to finance such operations and will prefer jobs with established air transport lines.

• **Many Claims**—Motor bus interests have filed a claim to the right to operate supplementary air passenger services in defiance of Howe's determination to

Canada War Production Cut Back

Canadian war production has hit its peak; except in a few lines production will start downward in 1944.

Reporting on the war program in the Canadian House of Commons, Munitions & Supply Minister C. D. Howe gave comparative production figures for 1942 and 1943, and summarized total wartime output to Mar. 1, 1944 (table).

In addition to indicating those lines which will continue to expand

and those which will be cut back this year, Howe emphasized shifts in production schedule for this year: (1) Aircraft production will concentrate on combat types; (2) the number of mechanized vehicles will continue to drop as heavier types are produced; (3) while army guns built in 1944 will be fewer, naval gun output will rise; and (4) completion of war plant and housing will cause a sharp drop in construction expenditures.

Article	Production		Total
	1943	1942	July, 1939, to Mar. 1, 1944
Expanding Production in 1944			
Aircraft	4,133	3,811	11,390
Machine guns	580,000	325,000	1,000,000
Naval vessels	100	117	336
Instruments	\$180,000,000	\$84,000,000	\$320,000,000
1944 Output About Equal to 1943			
Armored vehicles	15,500	12,500	34,000
Gun ammunition (rounds)	30,000,000	28,000,000	62,000,000
Small naval craft	3,600
Declining Production in 1944			
Mechanical transport	175,000	192,000	593,000
Artillery guns	45,000	31,000	84,000
Small arms ammunition (rounds) ..	1,500,000,000	1,200,000,000	3,500,000,000
Chemicals, explosives (tons)	500,000	430,000	1,500,000
Cargo vessels	150	81	240
War construction	\$194,000,000	\$219,000,000	\$675,000,000

all surface carriers from the air. Spearheading resistance to Howe's plan is the powerful Canadian Pacific Railway which through Canadian Pacific Air Lines controls all but one of the independent air services now operating in the Dominion. A highlight of Howe's air plan was notice to C.P.R. that it had until a year after the war in Europe to get out of the air transport business.

Licenses Refused—Air licensing authorities, under Howe's direction, have refused licenses to Canadian Pacific Air Lines for projected services, especially in the West. Howe took the additional precaution last fall of putting through an amendment to Canadian air regulations giving him power to bar transfer of the stock of any air transport licensee, obvious object being to prevent further amalgamation of independent airlines.

It is no secret that these steps have been inspired by a fear that Canadian Pacific planned to link separate routes into a transcontinental system capable of competing with T.C.A.

Matter of Tactics—Howe has an ace up his sleeve. Original announcement of his air policy contained no provision for assistance to the aircraft industry after the war. Omission was merely a matter of tactics. A supplementary announcement of war-end government orders to keep aircraft firms in operation for some years after the war is expected shortly.

Montreal the Hub—Ottawa will place orders with Vickers, Fairchild, Noorduyn, and Fleet, for designs for several types of trainer and transport planes and the construction of test models. This would make Montreal, where the first three firms are located, the hub of the postwar industry.

BIG KRAFT PULP MILL

TORONTO—A \$10,000,000 project including a bleached kraft pulp mill, a new town, and a dock 1,300 ft. by 450 ft., near Peninsula, Ont., on Lake Superior, is to be started immediately, according to Niles N. Anderson, vice-president of the Marathon Mill of Canada, Ltd. The Dominion Controller of Construction for the Dept. of Munitions & Supply, Ottawa, has given approval to proceed with the project, which—when completed—will provide permanent employment for 1,500 men in mill and timber operations.

The mill and its auxiliaries will cost \$8,500,000 and the townsite \$1,500,000.

Output of the mill, if completed in time, will go to the United States for conversion into essential wartime products. The Canadian Pacific Railway is building a spur line to the project, which will handle several hundred thousand tons of freight annually.

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THE MARKETS

(FINANCE SECTION—PAGE 74)

In the final hour of trading on Tuesday this week, New York Stock Exchange member firms suddenly were inundated by the greatest avalanche of selling orders they have had to cope with since the memorable Mussolini-rollback of prices last July.

• **Ticker Falls Behind**—As a result, market values of many erstwhile 1944 trading favorites dropped one to three points in short order, and statistics revealed that 750 of the 972 issues traded in that day registered losses. Moreover, many traders' desire to sell was so much in evidence that during a portion of the closing hour the ticker, for the first time in many months, was unable to keep up with the pace of transactions on the floor.

Subsequent trading sessions have not produced similar market action. However, prices have been showing a tendency to slip even lower, and many conservative market students are still far from satisfied that this week's "corrective" move has definitely completed its course.

• **Some Optimism**—According to the Street's bullish brethren, the drop has been mainly due to "technical" reasons. Also, they believe that any further recession of prices would bring about a sharp rally.

Others, however, are not at all that optimistic. They say that Tuesday's selling merely brought to a head the bearish sentiment which had been rapidly growing in recent weeks as a result of the continued failure of the March rally further to extend its gains after such an auspicious start.

They point, as well, to the appreciable

contraction in speculative interest in stocks as a whole and to the fact that the buying in the rail equities recently has been less reasoned and more speculative than at any period since the rail surge evidenced in the closing stages last spring of the 1942-1943 bull market.

• **Unfavorable Factor**—The continued drop in rail earnings (page 78) is another unfavorable near-term factor to consider, according to this group. Also, they wouldn't be at all surprised, either, if the enthusiasm of even the more daring traders hasn't been pretty much cooled off lately by growing wartime uncertainties generated by the apparent stalemate in Italy and the approaching invasion of Europe.

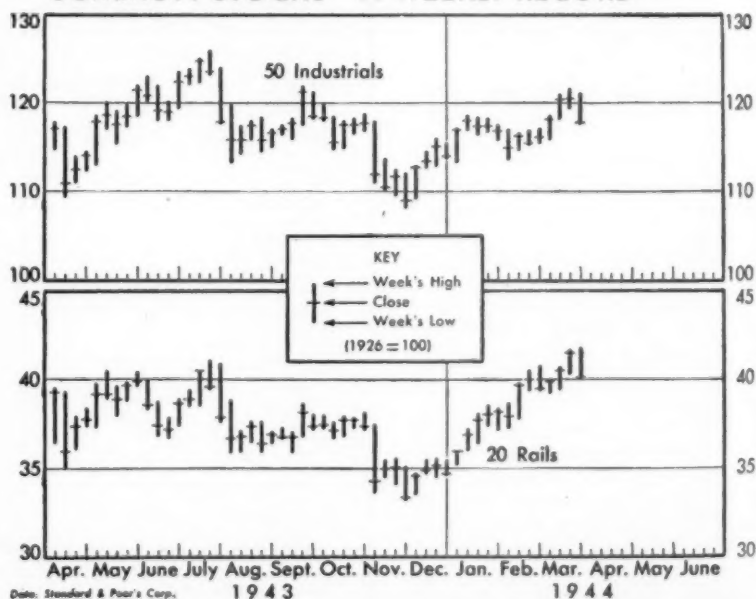
Of more than passing interest, too, is the talk now being heard concerning the possibility of a cut in the \$1 quarterly dividend that has been paid on U. S. Steel common over the last four years. Certain directors of the company, because of the drop in earnings to 34¢ per share in the last quarter of 1943 and near-term earnings outlook, are said to have vigorously advocated doing this in January.

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial ...	117.8	120.5	116.2	116.2
Railroad	40.1	41.5	39.5	36.8
Utility	51.5	52.2	51.0	44.6
Bonds				
Industrial ...	120.4	120.0	119.5	117.2
Railroad	104.8	105.6	105.5	97.1
Utility	116.0	115.8	115.7	112.6

Data: Standard & Poor's Corp.

COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

1943

1944

THE TRADING POST

Yours as Much as Mine

A couple of weeks ago, while walking along the street in a Texas town, I noticed a corporal drive up to the curb in an army jeep. He parked alongside a parking meter and got out. As he stepped up on the sidewalk he turned, looked at the meter, then at the jeep, stood irresolute for a moment, then turned and started down the street.

The town constable, who had been watching the whole performance from a doorway, called after him.

"Hey, buddy! You better drop a nickel in that meter."

The soldier stopped and turned. He looked first at the constable, then at the meter, then at the jeep and finally turned again to the constable.

"Put it in yourself," he replied, "that jeep belongs to you as much as it does to me."

Exeunt soldier and constable, laughing.

Several times since then I have recalled that exchange. I suppose it's easy to attach too much significance to the everyday incidents that come to our ken, but I suspect also that it's equally easy to take them in our stride and attach too little significance to them.

For example: Right here, it seems to me, is a good example of just what happens when we begin to get away from individual ownership and private interest and into collective ownership and communal interest. Nobody feels any responsibility for anything so long as everything "belongs to you as much as it does to me."

In saying this, I am not forgetting that most of the discussions about the relative merits of collectivist vs. individual enterprise miss the point because they put the choice on a basis of "either-or." As a matter of fact, the issue is wholly one of degree. We are not required, if we have a grain of sense, to choose between an out-and-out collectivist or an out-and-out individualist solution to our economic and social problems. Many years ago, men wrote off the second as impractical. Now the question is simply one of where to strike a sound balance.

The argument comes up when we try to choose between having a collectivist society, modified as little as possible in order to use effectively the merits of individualism, and having an individualist society, modified as little as possible in order to conserve the best

interests of the community as a whole. That is the real issue that confronts us in practice.

Neither do I overlook the possibility that some day we may breed a race of men so strongly endowed with a community sense that they will need no longer the incentives of personal advantage to give society the benefit of their best work.

But that day is not here yet. Indeed, my own observation has been that those who yelp the loudest for collectivist measures to heal the abuses of private power are themselves the most arrogant and ruthless users of community power once they get it into their hands.

* * *

Taking account of all this, we may say with confidence that, with human nature as it is, for every degree that we dull individual self-interest, we dull to an equal degree the sense of individual responsibility. And, as the latter is weakened, we must rely more and more upon some form of collective authority to provide the motors that no longer are provided by the interplay of individual incentives. We must substitute for the automatic thermostat of many individual interests the manual control of a centralized community authority.

And when we do that, we are squarely on our way to the absolutism and bureaucracy that has yet to prove in practice its capacity to do more for the plain people of the world than the individualist system it is trying to supplant.

All of which poses the real question that we must answer. It is this: How can we best hold the progress that has been made by those who have gone before and add to it some of our own contriving? Can we do that most surely by relying chiefly on the individual incentive to excel in competition, using as little community power as may be needed to keep the competition on an equitable basis? Or must we suppress, or at least dampen substantially, those private interests and incentives to a point where we must rely on a new and relatively unproved set of motors powered chiefly by the cooperative instinct?

Unfortunately it still holds that everybody's business is nobody's business. So the more activities we can keep out of the category of everybody's business and in that of somebody's business, the more likely it is that the business of all will be dealt with aggressively. The big job of government is to see that that business is carried on wisely and equitably as well as aggressively.

W.C.



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THE TREND

A JOB FOR THE MARKET SPECIALISTS

Under the aegis of the Marketing Committee of its Field Development Division, the Committee for Economic Development is currently undertaking a survey of postwar markets which potentially is of the utmost importance for business and economic planning. It is a second step on the road first opened by "Markets After the War," which was completed almost a year ago (BW—May 1943, p108) by the Commerce Dept. economist, S. Morris Livingston, and has been widely distributed by C.E.D.

• If we had full employment, and a capacity gross national product, how much would each industry sell? We truly don't know, and our ignorance is a major obstacle to planning the achievement of our goal. The "Markets" study projected a postwar industry breakdown on the basis of relationships which have prevailed in the past. Now the C.E.D. is going to trade associations and major companies for each one's appraisal of its industry's prospects—first, on the assumption of full employment, second on whatever assumption each estimator feels will be realistic for the first postwar year.

It's necessary to do this—to go beyond the "Markets" study—for several reasons. For one thing, relations that held in the past may not apply right after the war. There will be accumulated demands to make up in some lines that will distort "normal" markets. Accumulated savings may affect patterns in all lines. New, major foreign markets may open up. Some important new products will suddenly be introduced after the wartime hiatus. Government surpluses may saturate some markets. Bottlenecks in materials may prevent filling some potential orders. Facilities may be inadequate to produce other wanted goods. None of these factors can be taken into account in a mathematical projection of past, "normal" relations among industries. But they must be entered into any quantitative picture of the postwar economy, and industry's own specialists, if they have the training in analysis which is a prerequisite, alone can do that.

• Another reason for industry study of markets is that more than one mechanical projection of the "Markets" type is possible—a fact which Commerce economists are the first to point out—and a choice among assumptions is necessary. For example, suppose we ask: On the basis of past relationships, what would be the demand for autos in a full-employment year?

Well, we can compare auto sales each past year with total gross product and, from the relationship, estimate auto sales in a year of capacity gross product. But another way would be to compare with the gross product for each past year the number of autos which consumers chose to maintain on the road, and obtain an estimate of

autos-on-the-road, and annual normal replacements for them, in a full-employment year.

Now, the first answer will be much higher than the second. For, in the past, we failed to make normal replacements in bad years and so had to make up more than one year's normal replacements in good years. Our projection of sales in a full-employment year—an extra good year—will, therefore, assume heavy extra-normal replacements. Contrariwise, even in past good years we never maintained on the road all the cars we might like to use under sustained full employment because we had to make up bad-year deficits in good years and never could do so fully. So, both mathematical projections of sales are probably inaccurate representations of auto markets under sustained prosperity.

Where lies the truth? That's something each industry's market specialists know most about. The differences resulting from various methods of projection must be taken into account even for the first postwar year.

• Because of such distortions in simple projections, we sometimes get estimates of markets for various finished products which are inconsistent with those for the raw materials going into them. For example, we might get an independent estimate of the total market for steel which turned up a tonnage much bigger than the total of steel called for in the production of autos, freight cars, and similar goods which we estimate will be bought.

An integrated, realistic appraisal of industry markets in a first postwar year of full employment would help to reveal any gaps in our economy. We might find excess productive capacity in one industry, but inadequate facilities in another.

If so, we'd have to consider planning how to expand the market for the first industry—by lower prices, new products, intensified selling—or how to break the bottleneck in the second—by overtime work, new plant, increased efficiency. And differences might emerge between this full-employment picture and the breakdown based on the analysts' best guesses of what actually will be sold. The importance of these differences is obvious.

• The significance for postwar planning of this advance in quantitative analysis need not be labored. But, as a last word, the various estimating procedures must implicitly make certain assumptions about basic variables, and, if the over-all results are to be at all meaningful, any differences in such assumptions cannot be left masked behind a conglomerate, composite set of figures; they must be brought to light and ironed out, before conclusions are drawn.

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